Public Utilities

FORTNIGHTLY

May 8, 1941

PUBLIC UTILITIES REPORTS, INC.
PUBLISHERS

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Public Utilities Fortnightly

VOLUME XXVII *May 8, 1941* NUMBER 10

Contents of previous issues of PUBLIC UTILITIES FORTNIGHTLY *can be found by consulting the "Industrial Arts Index" in your library.*

Advertising Section

¶ *This magazine is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.*

PUBLIC UTILITIES REPORTS, INC., PUBLISHERS
Publication Office ..... CANDLER BUILDING, BALTIMORE, MD.
Executive, Editorial, and Advertising Offices ..... MUNSEY BUILDING, WASHINGTON, D. C.

PUBLIC UTILITIES FORTNIGHTLY, a magazine dealing with the problems of utility regulation and allied topics, including also decisions of the regulatory commissions and courts, preprinted from *Public Utilities Reports, New Series,* such Reports being supported in part by those conducting public utility service, manufacturers, bankers, accountants, and other users. Entered as second-class matter April 29, 1915, under the Act of March 3, 1879. Entered at the Post Office at Baltimore, Md., Dec. 31, 1936; Printed in U. S. A.

PRICE, 75 CENTS A COPY ANNUAL SUBSCRIPTION, $15.00

Pages with the Editors

HAS there ever been a time in the history of America when social gains have been blocked or actually turned back? We hear a great deal about "reactionary" circles. But when we investigate seeming periods of stalemate in social or technical progress, we usually discover evidence that the march of progress was not blocked nor even detoured. It merely assumed another form.

IF we study our national history from the black days and nights of Valley Forge, we can trace a steady onward and upward trend towards greater social and economic opportunities for various classes or minority groups, whether of race, color, or creed, or previous condition of servitude.

THE superficial student, for example, may point to the decade after 1920 as a period during which the light of liberalism burned low. Our young people in colleges have been taught during recent years that the decade between 1920 and 1930 was a veritable Dark Age. Yet, it was during this period that the first old-age pension law was enacted (1923). And by 1929 there were old-age pensions in five states. A casual glance through the report of President Hoover's Committee on Social Trends (1932) would plainly show that there was no prohibition against liberal thinking in high places during the Hoover régime.

ALBERT W. ATWOOD

The biggest city in the world could not handle a full stockholders' meeting of the biggest utility in the world.

(SEE PAGE 588)

ROYDEN STEWART

Did the tractor reduce electric power to a secondary aide to agriculture?

(SEE PAGE 579)

INDEED, the more spectacular social gains made during the New Deal have been traced by some Republican orators to liberal seeds planted and carefully nurtured during the days when the shadow of the elephant fell across the White House. They would have us believe that the liberal legislation of the middle and late thirties was but the fruit of careful culture and arduous spadework during the twenties. Be that as it may, there is enough to be said on both sides to indicate that, in the long run, no political party has any monopoly on social thinking.

THE same thing goes in technological and industrial progress. The airplane invented by the Wright brothers shortly after the turn of the century remained in a cocoon stage of fabric wings and bamboo struts virtually to the end of the World War. But we know, as we watch the modern metallic monsters gracefully soaring above our heads today, that such a period of experimental trial and error was

an indispensable phase in the evolution of modern aircraft production. Plastic chemurgy remained practically imprisoned in laboratory test tubes from the days of Leo Hendrik Baekeland until very recent years. Yet it was not sleeping. If anything, it was being forced furiously through a necessary preparatory stage.

COMING to our own field of public utility service, we find a number of historical instances of periods of apparently arrested development. Steam power first pushed Fulton's steamboat, the *Clermont,* up the Hudson river in 1807. But it was 1827 before the first vessel crossed the Atlantic with steam power only. It took the remainder of the century for the steamboat to chase the sailboat off the sea as a vital commercial carrier. Watt invented the steam engine in 1765, but railroad operations did not begin until 1830.

RURAL electrification is one of those recently publicized developments of the electric power industry which many people seem to regard as something strictly modern. There is some reason for this impression on the basis of actual farms connected to central service lines. But before these lines could ever have been connected, there was much pioneer work that had to be done. It *was* done—with a perseverance and vigor that is all too quickly overlooked during these days when we count the number of electrified farms in terms of millions instead of thousands.

IN this issue appears the first of a 3-part series of articles by ROYDEN STEWART on the growth of rural electrification from its first stirrings to date. This opening instalment gives us some little known historical information on the pioneer days of rural power experimentation. MR. STEWART, who is an associate editor and staff writer of the Edison Electric Institute in New York city, is an Oklahoman by birth. His fiction and business articles have appeared in the *American Mercury, Liberty,* and other magazines and newspapers.

ANOTHER phrase we often see in modern writing is "industrial democracy." It is frequently associated with varieties of socialism. Yet, industrial democracy in the literal sense of the term is as old as the capitalistic corporation itself. Thus, in the case of a corporation such as the American Telephone and Telegraph Company, there are about as many stockholders qualified to vote as there are citizens in the entire District of Columbia (who, incidentally, are not qualified to vote).

IN this issue, ALBERT W. ATWOOD, for many years chief editorial writer of *The Saturday Evening Post,* analyzes the democratic aspects of widespread ownership of various public utility industries. MR. ATWOOD, at present a resident and civic leader of the District of Columbia, is a frequent contributor to this magazine.

JOSEPH B. KLAINER

Continuing property records can be a revenue producer instead of an expense.

(SEE PAGE 596)

JOSEPH B. KLAINER, associated in consulting service with Maurice R. Scharff of New York city, gives us another of his popular studies of continuing property records (see page 596). MR. KLAINER originally hailed from Wisconsin, graduated from the Massachusetts Institute of Technology ('25) and Northeastern University Law School ('31). He has made a specialty of rate case analysis work, stressing the various phases of continuing property record establishment—now a required accountant technique in the state of New York.

AMONG the important decisions preprinted in the back of this number, may be found the following:

THE Pennsylvania commission, in hearing an application for approval of acquisition and sale of pipe lines and rights of way, discusses the question of whether an agreement between affiliates for the sale of property requires its approval, if such agreement involves a single transaction covering fixed assets in which the monetary value of the consideration does not exceed one per cent of the undepreciated book value of fixed assets of the public utility. (See page 268.)

THE next number of this magazine will be out May 22nd.

The Editors

In This Issue

In Feature Articles

In Financial News

In What Others Think

In The March of Events

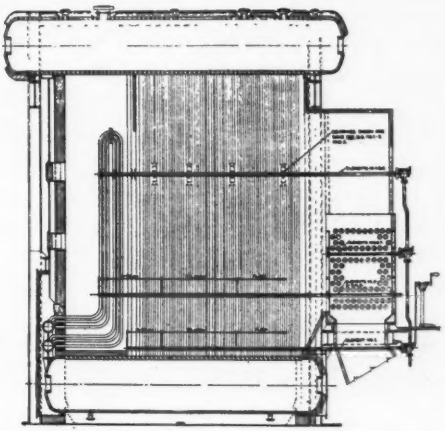
In The Latest Utility Rulings

PREPRINTS FROM PUBLIC UTILITIES REPORTS

Various regulatory rulings by courts and commissions reported in full text, pages 257–320, from 37 PUR(NS)

Another Example of VULCAN VERSATILITY *in Soot Blower Design*

Vulcan unit makes notable 4 year record in latest design, twin furnace Foster Wheeler steam generator installation at Oil City, Pa., station of the Keystone Public Service Company, operating on fuel relatively high in ash having a low fusion point.



Vulcan unit in twin-furnace Foster Wheeler steam generator completes 4 years' service with NO TROUBLE AND NO MAINTENANCE.

... This despite unusual problems presented by novel boiler and furnace design.

... As the drawing shows it was impracticable to install soot blowers from the front of the boiler as the furnace construction precluded installation of conventional type of elements and bearings to provide necessary protection and support.

... Hence, entry was made at the back necessitating carrying the elements a distance of about 26 ft., through the economizer and boiler tube banks to the superheater.

... Passage through high temperature, intermediate temperature and relatively low temperature zones, plus the factor of exceptional length, greatly complicated the problems of securing adequate thermal protection, dependable support, and at the same time provide for expansion and contraction without danger of cutting tubes.

Solution was found by using HyVULoy element section for the high temperature area, VULcrom element for the intermediate, with the balance steel; and providing specially designed bearings to hold the members in such a way as to eliminate hazard of tube-cutting and directed expansion toward the back of the boiler, where it could be taken up by a suitable expansion joint.

... Because of the advanced design of this boiler involving new features in soot-blower design and construction, Vulcan engineers inspected the installation monthly for many months, but the engineering was so sound that no trouble of any kind developed—Results—Perfect Operation—Perfect Cleaning—Reasonable Cost —And—VULCAN SOOT BLOWERS WERE SPECIFIED when a duplicate Foster Wheeler twin furnace steam generator was recently ordered by Keystone Public Service Company.

... Whatever the characteristics of your boiler and setting, fuel, or load, Vulcan engineers can successfully solve any soot blower installation and operating problem involved. We invite your consideration of Vulcan service with respect to any soot blower need.

VULCAN SOOT BLOWER CORPORATION

DU BOIS, PENNSYLVANIA

Remarkable Remarks

"There never was in the world two opinions alike."
—MONTAIGNE

SCOTT W. LUCAS
U. S. Senator from Illinois.

"I have no fears about a dictatorship."

EDITORIAL STATEMENT
Industrial News Review.

"Electricity is the one and only item in the government's standard cost of living index which is cheaper now than before the last war."

FLOYD W. PARSONS
Editorial director, Gas Age.

"We were the inventors of mass production. No combination of powers can outproduce us."

CHARLES A. SPRAGUE
Governor of Oregon.

" . . . when you feed out of the hand of Washington you have to take what they feed you."

PHILIP B. FLEMING
Wage-Hour Administrator.

"Your government wants another work week added to the performances of production machines, not another eight hours added to the performance of the workers."

ROSWELL MAGILL
Professor of law, Columbia University.

"One great need of our democracy is to perfect ways and means for presenting the pros and cons of public issues in understandable form to the layman."

CLYDE T. ELLIS
U. S. Representative from Arkansas.

"After seven years of struggle and litigation against bitter opposition it [TVA] has emerged as the world's outstanding monument to democracy successfully at work."

EDITORIAL STATEMENT
The Texas Digest.

"There already is too great a tendency, even among conservative and well-informed people, to accept wastefulness and extravagance as unavoidable conditions of 'emergency' spending."

THOMAS H. ELIOT
U. S. Representative from Massachusetts.

"Experience in other countries gives us overwhelming evidence that if we want to speed up the defense program, the passage of a bill to outlaw strikes is a good way not to do it."

MARTIN J. KENNEDY
U. S. Representative from New York.

"The people speak and rule through us [Congress]. That is the American conception of democracy; but now we only speak and not too loudly, while executive agencies do the ruling."

W. A. HARRIMAN
Chief, Materials Branch, Division of Production, Office of Production Management.

"If you read the daily press carefully you will find there are a lot of back-seat drivers about the defense program."

FRANKLIN DELANO ROOSEVELT

"No pessimistic policy about the future of America shall delay the immediate expansion of those industries essential to defense."

DAVID E. LILIENTHAL
Director, Tennessee Valley Authority.

". . . the average annual use of electricity in the homes in the TVA area is 50 per cent greater than that for the nation as a whole."

ROBERT M. HUTCHINS
President, University of Chicago.

"A new moral order for America means a new conception of mastery. We must learn how to reconcile the machine with human dignity. We have allowed it to run wild in prosperity and war and to rust idly in periodic collapse."

PHILIP MURRAY
President, Congress of Industrial Organizations.

"If foolhardy statesmen believe that they can impose restrictions on working men and women to stop their legitimate efforts to pursue their legal rights then I say to those so-called statesmen that they are making a great mistake."

HUGH S. JOHNSON
Columnist.

"If Bill Knudsen doesn't fall a victim to the constant interplay of interdepartment intrigue and back-stabbing that is always going on in any top-heavy government, he has a good chance of becoming the Barnie Baruch of World War II."

RAYMOND MOLEY
Contributing editor, Newsweek.

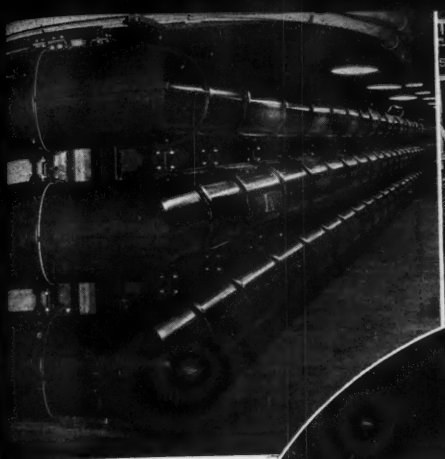
"It will be a triumph if our own nation comes through the world upheaval still possessed of its ancient faith—faith in economic and political freedom, faith that the greatest measure of personal well-being and of personal security can come only from a productive and free economic system."

H. W. PRENTISS, JR.
President, Armstrong Cork Company.

"If we are to build strong and secure the foundations of national defense, we must have a national economy that is strong, efficient, and well-balanced. A nation whose economic activities are based on free private enterprise cannot function in an atmosphere of uncertainty, distrust, and fear."

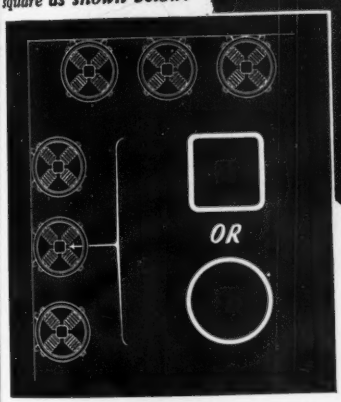
EDITORIAL STATEMENT
Investor America.

"Congress is receiving so many river 'authority' proposals these days, for the development of government-subsidized hydroelectric power, that some Congressmen are probably wondering if it wouldn't be a good idea to introduce a bill to 'harness the tides' of the old swimming hole or fishing stream back home."



Note neat, streamline appearance—easily accessible to inspection and adjustment.

No superstructure necessary—easily mounted to wall or ceiling. Note air gap between phases. Buses can be round or square as shown below.



R&IE METAL ENCLOSED BUS—Eliminates Interphase Shorts.

1. **All stresses taken by mounting frame with insulators in compression loading under all conditions.**
2. **Gasketed covers are housings only, —take none of the stress.**
3. **Installation and adjustment made before covers are put on.**
4. **Housing covers can be removed easily for inspection.**

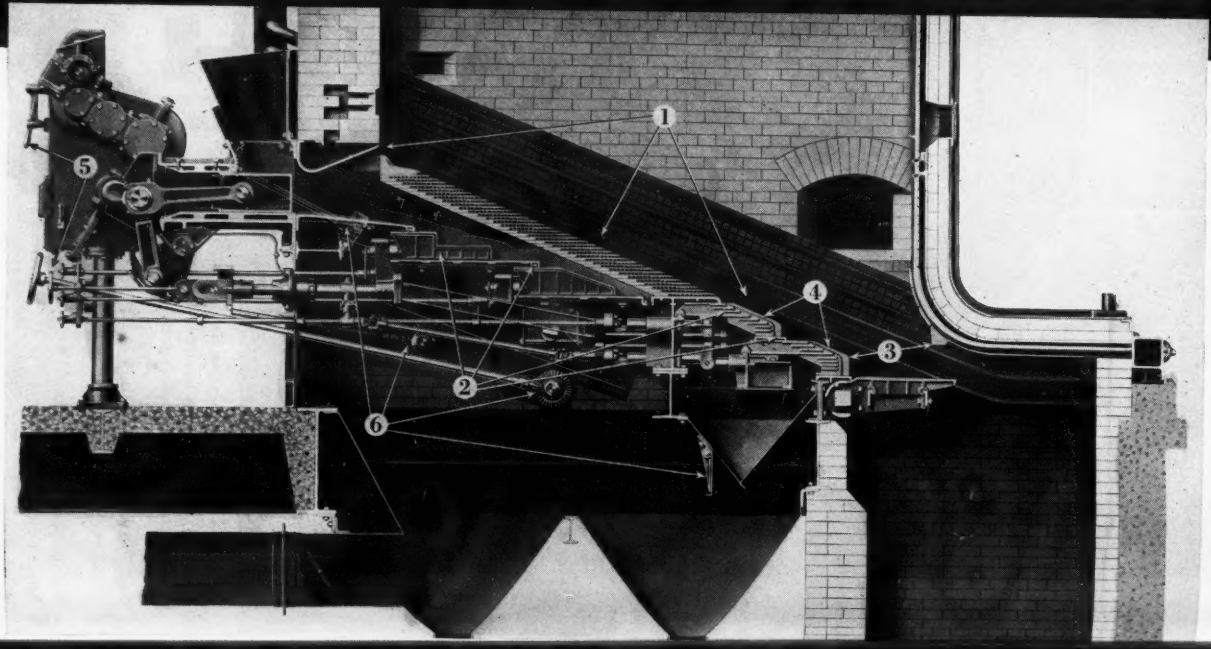
Expensive equipment investments may now be safe-guarded from interphase shorts often due to dust pocket flashovers in congested areas where buses are exposed, or due to support structure failure. Here is a new outstanding design consistent in cost with any type of bus structure.

RAILWAY AND INDUSTRIAL ENGINEERING CO.

GREENSBURG, PA. . . . . In Canada, EASTERN POWER DEVICES, Ltd., TORONTO

ADVANCED DESIGN FEATURES OF C-E MULTIPLE RETORT STOKER

IMPROVE EFFICIENCY, ECONOMY AND OPERATING SIMPLICITY



May 8, 1

1 UNIFORM FIRE Unequalled for uniform depth and even contour of the fuel bed which result from coordinated design of underfeed, overfeed and ash discharge sections. Proper agitation and movement of the fire from ram box to ash pit, with zone controlled air admission, produce a relatively thin and level fuel bed that assures complete and efficient combustion.

2 SEALED AGAINST SIFTING Nothing is overlooked to assure a stoker that's clean both inside and outside. The sides and leading edges of all secondary rams have effective riding seals that prevent sifting. Tuyeres are specially designed and the bars of the overfeed sections have overlapping ribs to restrict the passage of fine coal and dust. A device for the disposal of siftings from the main ram boxes practically eliminates the dust nuisance in front of the stoker.

3 EFFECTIVE ASH DISCHARGE Three effective means of ash discharge are available to suit individual operating conditions. For periodic ash discharge there are steam-operated single or double dump trays. Where continuous ash discharge is desired there are both the clinker grinder and continuous discharge tray types. In each case an ample discharge opening provides for normal disposal of clinkers without the use of hooks or fire hose.

4 RECIPROCATING OVERFEED SECTION The overfeed area consists of one or two sections depending on length of stoker, operating conditions and type of ash discharge. Alternate groups of fixed and moving grate bars in each section produce a slicing action that prevents ash adhesion, compacts the fuel bed and inhibits the formation of large clinkers. This action maintains a uniform fuel bed, advances clinkers when they are formed and permits combustion of carbon in the ash before discharge. The lower underfeed section also acts to propel the ash to the pit on stokers equipped with continuous discharge trays.

5 COMPLETE FRONT CONTROL All controls are conveniently grouped at the front of the stoker. They are easy to use and all adjustments can be made while the stoker is operating. They govern (1st) the zoned air supply; (2nd) the speed of the main rams; (3rd) the stroke of the secondary (distributing) rams and the stroke of the overfeed sections in any one retort either as a group or individually.

6 ZONE CONTROL OF AIR Individual dampers, which are operated from the front of the stoker, provide complete control of zoned air supply to the underfeed section, overfeed section and over-fire area at the front wall. Separate dampers control air supply to ash discharge section.

MANY OTHER FEATURES of the C-E Multiple Retort Stoker contribute to trouble-free operation and low maintenance. A high ratio of air swept surface to fuel contact surface in the tuyeres reduces renewals. With sectional construction of parts subjected to heat or wear, repairs when necessary are easy and economical. A shear pin coupling protects against unusual overload. The integral oil pump, which provides lubrication for the gearing, is mounted with its piping on the gear box cover where it is conveniently accessible. Column mounting gives firm support to the gear box independent of the stoker itself.

The superior features of this design are the result of ten years' painstaking refinement of a *better* C-E Multiple Retort Stoker which was originally developed in 1931. The man who knows multiple retort stokers will quickly perceive in this advanced design ample evidence of C-E's extensive experience which includes a total of 16,000 stokers of all types serving about 4,500,000 rated boiler horsepower. Additional information is available in a new catalog, MR-4. Write for your copy.

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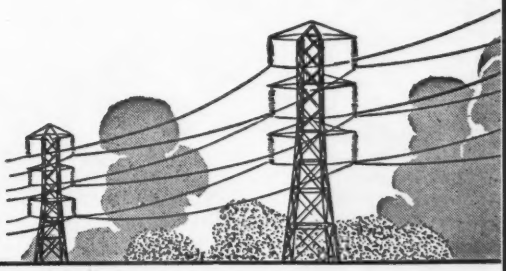
C-E PRODUCTS INCLUDE ALL TYPES OF BOILERS, FURNACES, PULVERIZED FUEL SYSTEMS AND STOKERS; ALSO SUPERHEATERS, ECONOMIZERS AND AIR HEATERS

Transmission line construction costs can be materially reduced and completion expedited by using Hoosier Crews



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Montreal

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BEHIND THAT NAME STANDS A BATTERY WITH WORLD-WIDE ACCEPTANCE

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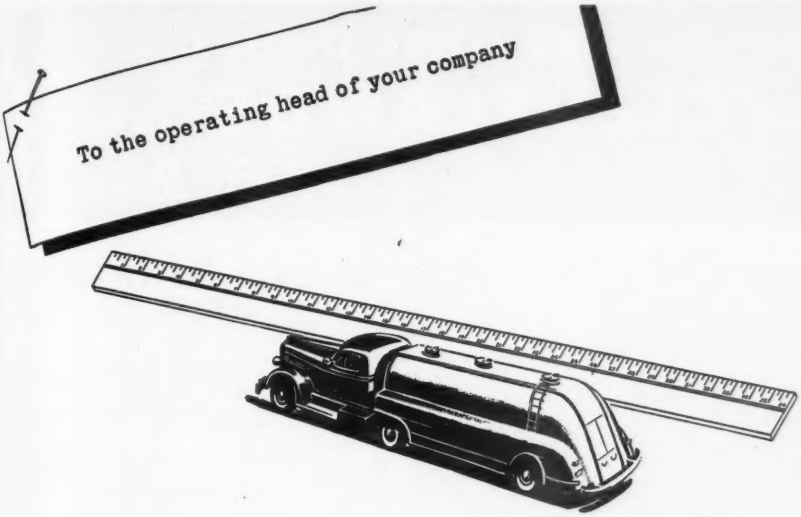
The World's Largest Manufacturers of Storage Batteries for Every Purpose

PHILADELPHIA

Exide Batteries of Canada, Limited, Toronto



THERE'S A BETTER YARDSTICK FOR MEASURING TRANSPORTATION COSTS

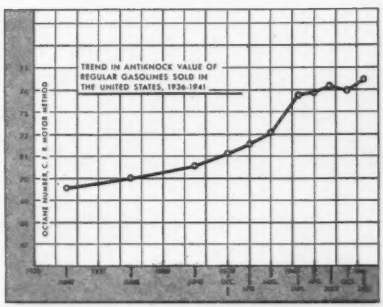
THERE'S a much better yardstick for measuring the cost of operating your trucks or buses than the price per gallon of fuel—and that is the net cost of the work accomplished by each gallon on a ton-mile or passenger-mile basis.

The amount of work you can get from a gallon of gasoline depends largely upon its octane number (anti-knock value). For the higher the octane number, the more power a modern high compression engine, or an older engine altered to take advantage of modern gasoline, can squeeze from every drop. The chart at the right shows how petroleum refiners have made possible important gains in power by substantially increasing the octane number of regular gasoline during the past five years.

There is little doubt that this trend will continue. And as gasoline improves, engines of higher compression ratios will be developed to convert this higher quality into better performance and lower net operating costs. Ethyl research and service engineers are assisting this progress in two ways:

First, by working with the automotive and petroleum industries in the development of future engines and fuels. Second, by helping fleet operators take advantage of improved gasoline through the application of our laboratory and proving ground findings.

For information as to how Ethyl engineers can help you make better use of today's better gasoline, write to Fleet Division, Ethyl Gasoline Corporation, Chrysler Building, New York City.



AS THIS LINE GOES UP, TRANSPORTATION COSTS CAN GO DOWN. *By making better use of today's better gasoline, commercial operators are reducing operating costs.*

Better and more economical transportation through
ETHYL RESEARCH *and* **SERVICE**

Economy is Standard Equipment in a

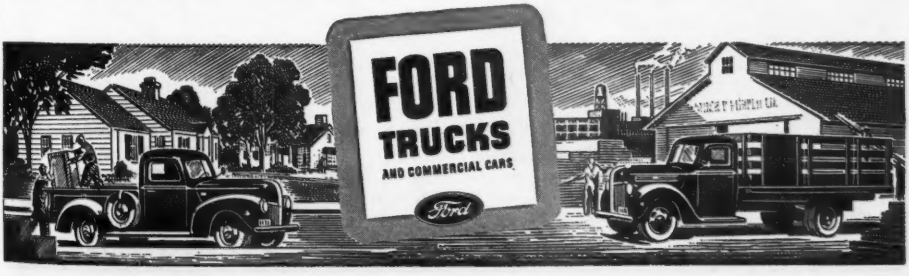
FORD TRUCK

FORD TRUCKS are economical, not only in low first cost, low fuel consumption, but also in low maintenance costs.

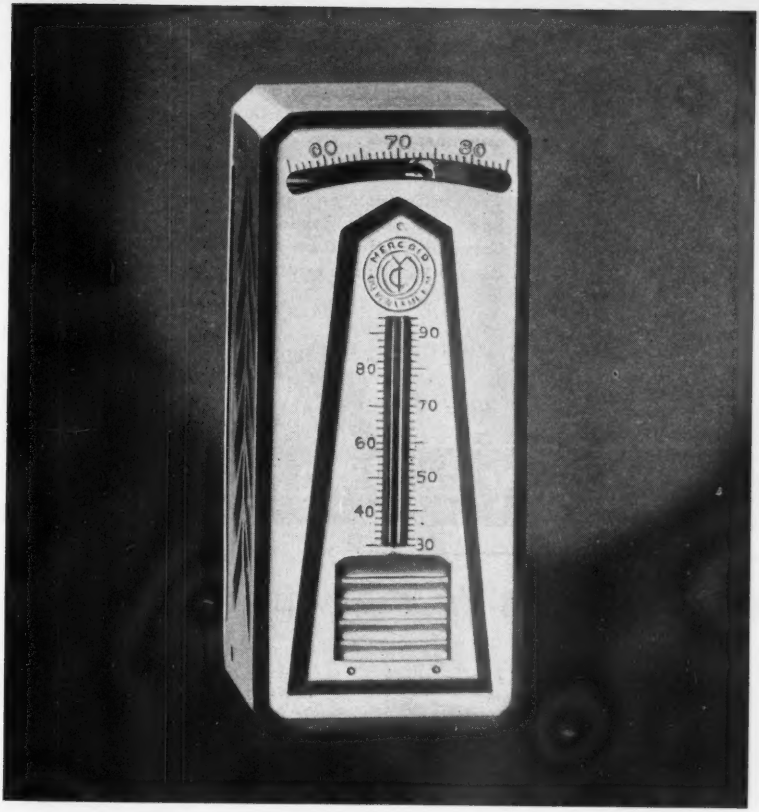
Every step in the building of a Ford Truck —from draftsman's board to final assembly— is planned to save you money. Ford economy is *built-in* economy.

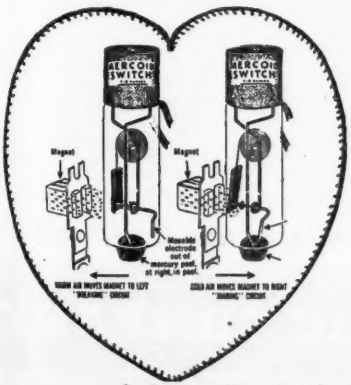
Many truck men know this. *Today, every third truck on the road is a Ford.* Many fleet owners are standardizing on Fords. And this class of operator watches every cent of cost, because fleet units must earn their keep!

Talk to your Ford Dealer. Tell him what you want a truck to do, and arrange for an "on-your-job" test with your own loads, own driver, on your regular routes.



CRAFTSMANSHIP IN A THERMOSTAT BY MERCOID





There is no mystery in the growing acceptance of the Mercoid Sensatherm. It can be accounted for in the recognition throughout the heating industry that here is a thermostat whose built-in qualities fit it for the field it serves. • The Sensatherm is of small mass. We build it that way to meet the requirements of sensitivity. Thus it responds quickly to the true room temperature changes. No artificial stimulant is necessary. Its own accuracy as a heating system pilot is a matter of record to everyone who is familiar with this outstanding instrument.

THE HEART OF THE SENSATHERM Beneath the cover is the Mercoid magnetic switch, an all important and exclusive feature found in no other room thermostat. The circuit is made and broken within a hermetically sealed glass tube—see illustration. The operation is not affected by dust, dirt or corrosion—common causes for heating discomfort and service calls.

Send for new Mercoid calalog now available. You will need it for the information it contains.

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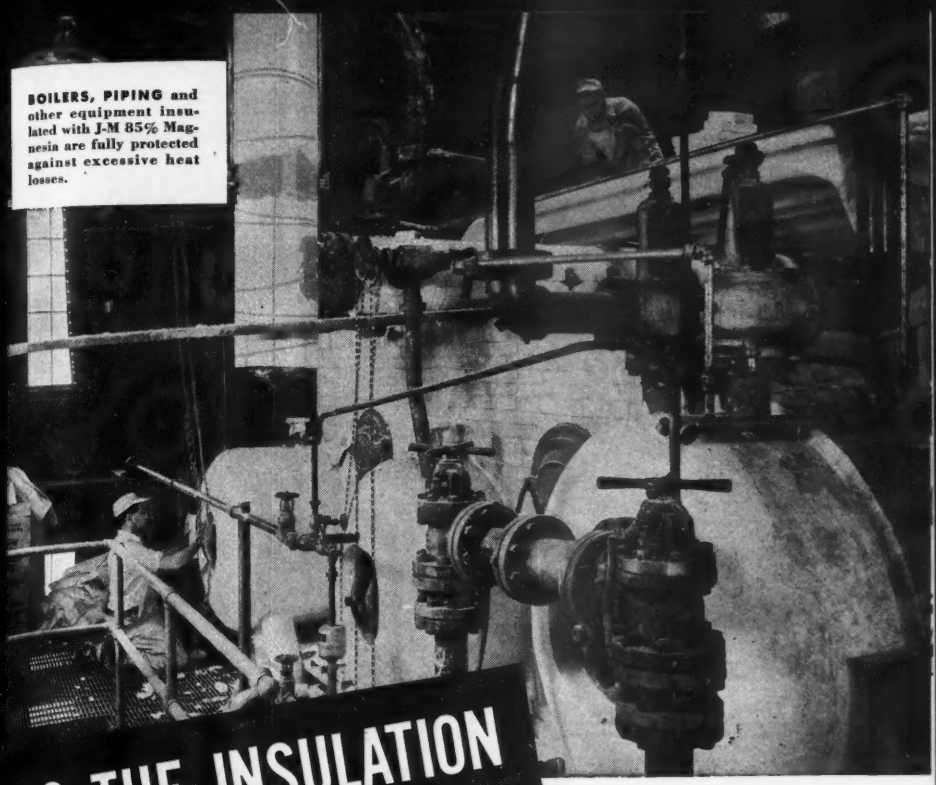

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ALMOST any insulation will save you some money on fuel. But to get fuel costs down to rock bottom . . . and to keep them there . . . it takes the *one correct insulating material*, applied in the *one most economical thickness*.

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FOR EVERY TEMPERATURE . . . FOR EVERY SERVICE . . .

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That's Why

Public Transit's the Way to Move People

THE little fellows out in front are trying to tell you in their own small way that the real traffic job in our cities is moving *people,* and public transit is your most efficient helper in this all-important job—a fact demonstrated time and again by traffic studies.

One of these studies, conducted recently by the Indianapolis Railways, measured traffic flow at the intersection of two busy streets in the heart of the Indianapolis business district. It was found that public-transit vehicles, which constituted *only 10 per cent* of the traffic at this bustling intersection, carried *70 per cent* of the people being moved. That's because transit vehicles carried an average of 27 passengers per vehicle, whereas private motor vehicles carried an average of only 1.4. These figures show that public transit, in terms of *moving people,* is by far the most efficient user of street space.

Such a study in your city would undoubtedly show similar results. It's obvious, then, that public transit has a big job to do—a job it can't do alone. Co-operate with public transit—a remedy for traffic congestion that *pays its own way*—and you'll be doubly rewarded. City life will be more efficient and your citizens will be happier. General Electric, Schenectady, New York.

ENCOURAGE PUBLIC TRANSIT—IT HELPS SOLVE YOUR PARKING PROBLEM

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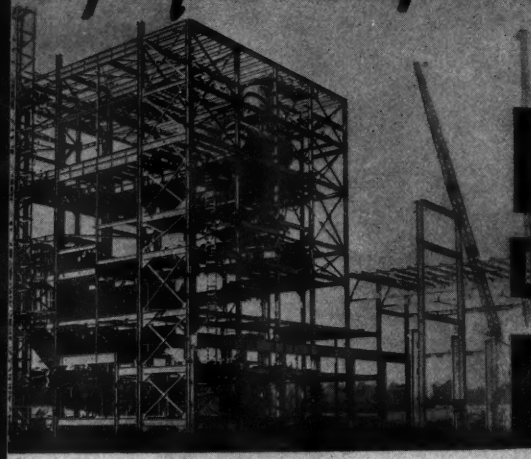
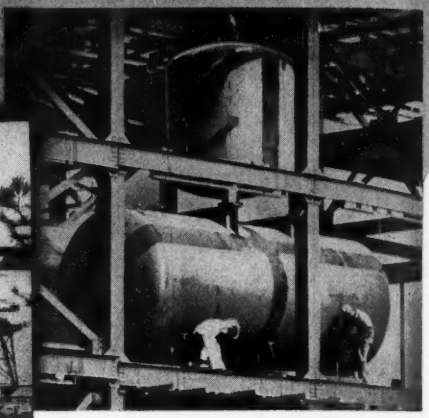
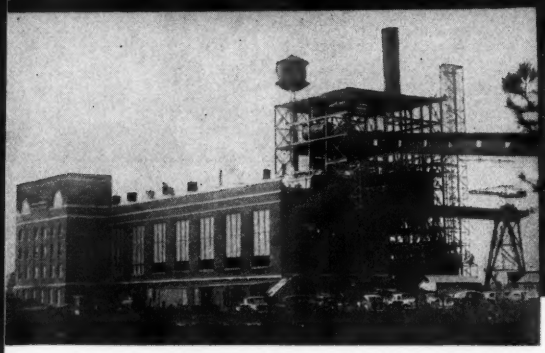
Up go new power stations protected by ELLIOTT DEAERATORS







The photographs show two interesting southern utility plants in construction — the Chickasaw Station of Alabama Power Company near Mobile, and Plant Arkwright of the Georgia Power Company near Macon. These stations are installing three Elliott 400,000-lb.-per-hr. vertical deaerators mounted on storage tanks — one unit at Chickasaw and two at Arkwright. (Plant Arkwright, in addition, is putting in two Elliott 31,300-sq.ft. condensers.) The deaerators, of Class I welded construction, are designed for an operating pressure of 100 lb. gage. They act as the No. 3 heater in a four-stage extraction heating system. Thus deaeration is obtained along with feed heating at very incidental cost. The storage tank provides for feedwater additions or rejection.

THE steel skeleton of a fine new power plant thrusts upward against the sky. Before it is completed, high up within the framework appears the form of an Elliott deaerating heater.

The high position of this unit might be considered symbolic of the importance to modern plants of feedwater deaeration. For designers agree that complete removal of oxygen from feedwater is a paramount consideration in high-pressure stations . . . and that the comparatively low cost of a deaerating heater is a bargain in trouble prevention and operating tranquility.

Elliott pioneered deaeration, and the unparalleled experience of our engineers is at your service in the designing and building of deaerating equipment in any required size, fitted in form and in accessories to your space and heat balance requirements.

In matters of deaeration, talk it over with the Elliott engineers.

ELLIOTT COMPANY

Deaerator and Heater Department

JEANNETTE, PA.

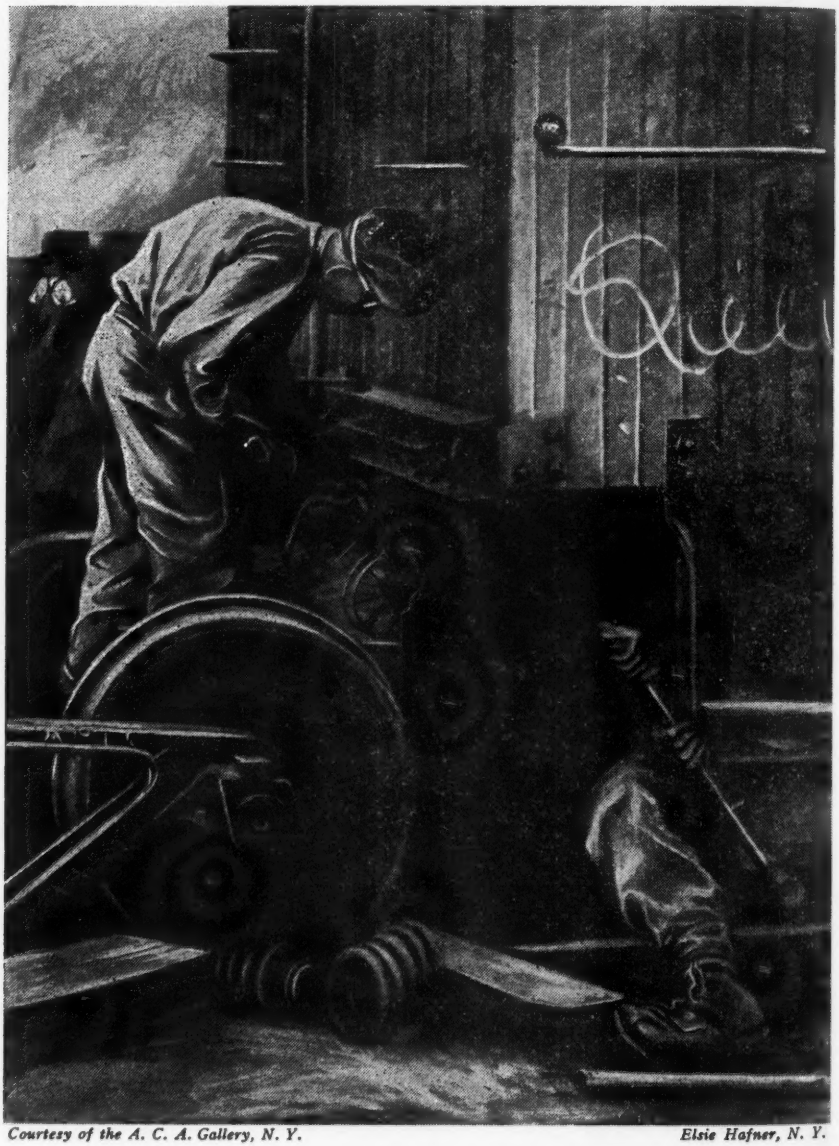
District Offices in Principal Cities

PRODUCTS: TURBINE-GENERATORS • MECHANICAL DRIVE TURBINES • ENGINES • ENGINE-GENERATORS • MOTOR-GENERATORS • MOTORS • GENERATORS • CONDENSERS • STEAM JET EJECTORS • DEAERATORS • FEED WATER HEATERS • DEAERATING HEATERS • CENTRIFUGAL BLOWERS • TURBO CHARGERS • COMPRESSORS • STRAINERS • SEPARATORS • GREASE EXTRACTORS • NON-RETURN VALVES • LACONDA LIBERTY TUBE CLEANERS

Utilities Almanack

MAY

8	T^h	¶ *Mid-West Industrial Gas Sales Council opens spring meeting, Rock Island, Ill., 1941.* ¶ *National Metal Trades Association convenes, Chicago, Ill., 1941.*
9	F	¶ *Natural Gas and Petroleum Association of Canada will hold convention, Hamilton, Ont., May 22, 23, 1941.*
10	S^a	¶ *New England Transit Club will convene, Boston, Mass., May 22, 1941.*
11	S	¶ *National Conference on Planning begins meeting, Philadelphia, Pa., 1941.* ¶ *National Electrical Manufacturers Asso. convenes, Hot Springs, Va., 1941.*
12	M	¶ *Indiana Gas Association starts convention, French Lick, Ind., 1941.* ¶ *Pennsylvania Gas Association begins meeting, Skytop, Pa., 1941.*
13	T^u	¶ *Conference of Engineers of the State Public Utility Commissions begins, Washington, D. C., 1941.*
14	W	¶ *Upper Peninsula Water Works Association starts session, Escanaba, Mich., 1941.*
15	T^h	¶ *Pennsylvania Independent Telephone Association starts meeting, Altoona, Pa., 1941.*
16	F	¶ *Empire State Gas & Electric Association, Electric Operating Group, will hold meeting, Schenectady, N. Y., May 23, 1941.*
17	S^a	¶ *National Association of Purchasing Agents will hold meeting, Chicago, Ill., May 26-29, 1941.*
18	S	¶ *National Electrical Wholesalers Association opens annual convention, Hot Springs, Va., 1941.*
19	M	¶ *AGA starts production and chemical conference, New York, N. Y., 1941.* ¶ *Western Metal Congress and Exposition open, Los Angeles, Cal., 1941.*
20	T^u	¶ *Canadian Gas Association starts convention, Hamilton, Ont., 1941.* ¶ *New York State Telephone Association begins meeting, Jamestown, N. Y., 1941.*
21	W	¶ *Pacific Coast Electrical Association convenes for meeting, Coronado, Cal., 1941.*



Courtesy of the A. C. A. Gallery, N. Y. *Elsie Hofner, N. Y.*

Car Knockers

By Joe Jones

Public Utilities

FORTNIGHTLY

VOL. XXVII; No. 10 MAY 8, 1941

Bringing Power to the Farm

Article 1—Early Development Years

A 3-part description, with analytical discussion, of the three phases, respectively, which have occurred in the development of rural electrification in the United States. In this article, the author reviews and examines attempts to bring electric power to the farm from the birth of the power industry in America to the year 1923.

BY ROYDEN STEWART

MORE than a half-century has passed since Thomas Edison one brisk morning in 1882 opened the doors of America's pioneer central electric station in Pearl street, New York. Here the public was first offered electric service. Since then the American electric power industry has become the biggest and the best in the world. Without it our great modern cities, our all-important national defense effort, indeed civilization itself as we know it, would be impossible.

But what of the farmer and his family? What has electricity meant to them? It is doubtful if even Thomas Edison in 1882 would have hazarded a surmise that by 1941 nearly half of all the farms in the United States which could ever be logically served with electricity would be so connected. In that day, the transformer had not yet made it possible to send the life-giving current even from downtown to uptown New York city without costly and wasteful cables as thick as a man's leg. Edison, logically, was concerned with serving the city itself, or even a part of it; the rural hinterlands might well have seemed as remote from service prospects as the eight moons of Saturn.

Today there are over 6,000,000 oc-

cupied farms in the United States, of which about 4,000,000 have dwellings valued at more than $500. This probably represents the optimum of present rural electrification prospects. Of this optimum figure, more than 2,000,000 farms have electric service. The task of electrifying rural America is thus about half done and proceeding rapidly.

When did this happen? Who is responsible for it? What has been the rate of progress, and what are the prospects for future progress? These are questions which naturally arise in connection with any appraisal of rural electrification in America today.

Practical extension of electric service to farmers got under way at least thirty-five years ago. Rural electrification on a nation-wide basis has been a first-line objective of farm organizations as well as the utility industry since 1923. The entrance of the Federal government into the field in 1935 inevitably brought rural electrification into the realm of political discussion. These three developments thus mark three natural divisions or phases in the work of bringing power to the American farm.

It is noteworthy that by the end of 1935 there were 789,000 farms receiving service almost entirely from privately owned electric utility lines. It would follow from this, of course, that progress has been much more rapid in the last five years. As of December 31, 1940, the Federal REA had advanced over $350,000,000 to nearly 800 coöperatives throughout the nation, which served approximately 540,000 farms. Meanwhile, the private electric industry had nearly doubled the 1935 number of its farm customers, so that by the end of 1940 it was serving over 1,500,000 farm customers, making a total of about 2,100,000 farms served through the United States as of that date.[1]

It is an interesting fact that the first serious experimental use of electric power on the farm was for plowing, while the first real installation in regular operation was a hoist for handling beets in a sugar factory. These early applications, according to *Electrical World* of October 13, 1906, were made in 1878. And it is significant that of these first farm applications, only the electric power hoist remains today. The vision of the practical electric plow was shattered long ago with the development of the tractor.

That is about the way electricity on the farm functions today. It is an auxiliary service. It makes life easier. It helps with important chores. It improves the efficiency and economy of processing and handling farm products. But the actual production of field crops has not been electrically powered, except for such indirect devices as electric water pumping or such specialities as dairy farming.

We must bear this important reservation in mind when we discuss the electrification of agriculture; namely, that the primary agricultural activities —plowing, planting, growing, cultivating, and harvesting—remain virtually unaffected by electric power operation.

The first practical steps towards rural electrification naturally came in the form of small individual generating plants, mostly operated from local water power, and later by small inter-

[1] Figures taken from *Rural Electrification News*, January-February, 1941.

nal combustion engines. Before the turn of the century, farmers in irrigated areas of the Far West were using electric pumps powered from individual generating plants.

In other words, few farms were receiving central station service. The first central station line available for rural customers was operated in 1906, when the Aurora, Elgin & Chicago Railway began furnishing power to farmers along its right of way.

A few months later (July, 1906) the Pacific Power & Light Company built what has been claimed to be the first exclusively rural power line. It was one mile long and had five customers living near Hood River, Oregon. By 1910, 20 more miles were added. The Hood River installation became such a pacesetter that as late as 1928 the Hood River valley boasted of being the country's most completely electrified rural district.

And so, a whole quarter of a century (or almost half the life of the electric industry) had intervened between Pearl street and Hood River. The Oregon farmers, unlike their city cousins who wanted power primarily for better lighting, were chiefly concerned with power for irrigation purposes, and for the operation of small general utility motors.

The electric industry, as already noted, first had to overcome its urban limitations before reaching out into the countryside. In 1900 industrial electrification was still regarded as highly speculative and there were heated debates on whether an electric system could be made profitable in a manufacturing center of 100,000 population. As late as 1910 the direct application of electricity to heating and cooking appliances was regarded doubtfully.

CONSIDER the relative growth of central station customers in the cities, during this pioneer period: There were 25,000 customers in 1890, 350,000 at the turn of the century, 583,000 of all classes when the first electric census was taken in 1902, and still less than 2,000,000 during the second census in 1907. Probably not more than a few thousand of those 2,000,000 customers in 1907 were farms. (Definite figures are not available.) In 1940, there were 30,000,000 electric customers of all kinds in the United States.

Many of the early utility managers saw possibilities in farm service, but line costs, ranging from $1,200 to $2,000 a mile for perhaps two or three farms with limited demand, were a formidable economic barrier for a still young industry. And, lacking almost entirely the network of generating plants and transmission lines that covers the country today, it was physically impossible for these early utility men to

¶ "TODAY *there are over 6,000,000 occupied farms in the United States, of which about 4,000,000 have dwellings valued at more than $500. This probably represents the optimum of present rural electrification prospects. Of this optimum figure, more than 2,000,000 farms have electric service. The task of electrifying rural America is thus about half done and proceeding rapidly.*"

extend service to rural sections on any considerable scale. They could only look forward to technical advances and to the time when increasing farm demand, better financial reserves, and decreasing construction and operating costs would make the ventures in rural electrification at least pay their own way.

The industry's precursor of an organized rural electrification program was probably Herman Russell of the old Rochester (N. Y.) Railway & Light Company. His company had been experimenting with promoting electric service for irrigation as "drouth insurance" for New York farmers. He told the 1910 convention of the National Electric Light Association:

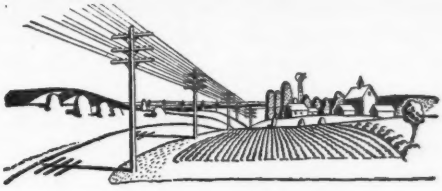
> I look forward to a time not far distant when electric lines in the country will be as common as telephone and telegraph lines are today and the present enormous idle investment of our central station companies will be employed in making our farms more productive and life more worth the living for both the farmer and the company—at good profit to each.

THE convention was impressed. Result: A Committee on Electricity in Rural Districts was set up. And it is the 87-page report of this committee, presented the following year, 1911, which probably marks the first systematic accumulation of farm electrification data. Here are the outstanding points developed in this report:

> The committee found that farm service had the advantage of being off peak—using electricity during the times of day and seasons of the year when city demand was relatively low. However, the large investment required for lines, transformers, and other equipment was viewed as a deterrent. Today changing conditions have virtually eliminated any substantial off-peak advantage of farm service. And while construction and maintenance costs have been considerably reduced since 1910, they still remain the greatest barrier to complete farm electrification.
>
> The 1910 committee had sent a questionnaire to central stations and electric railway companies (then important retailers of electricity) throughout North America. Incomplete returns showed 44 districts in 22 states in which farms were served. Farmers owned their lines in 6 districts. The companies owned them in 20, and there were varieties of joint ownership in the balance reporting. The rates varied widely, ranging from 1½ cents to 15 cents per kilowatt hour, with individual monthly bills from $1.30 to $41.60. Incomplete as it is, this report is the only record we have of rural electric service in the United States in 1910.
>
> The committee recommended a 3-point program which was adopted by the NELA: (1) Urging the Department of Agriculture to get out a farm electricity bulletin; (2) the establishment of a committee to draft a set of resolutions on farm use of electricity similar to those adopted by the gasoline engine trades; (3) investigating existing farm machinery with a view to adapting the same to electrification.
>
> The committee further reported that a majority of the 77 agricultural colleges approached had shown "considerable interest" in the committee's work. It found that household appliances used in the city could be used just as well by the farm housewife. Thirty-eight farm machines were listed which might be electrified.
>
> The committee noted that it had called on Secretary of Agriculture Wilson, who "accorded a most courteous and attentive hearing for nearly an hour and then took the subject under advisement." The committee also noted that the Census Bureau might be helpful in securing data on the extent of central station service by farms.

TWO years later the 1912 report of the NELA committee also brought out some interesting facts on the progress of rural electrification. Among these were:

> The state (as distinguished from the national) electrical associations had begun to take interest in the problem, and in 1911 heard a number of papers at several meetings. Numerous articles had appeared in technical and popular magazines—some reprinted in newspapers.
>
> The Pacific Power & Light Company was continuing its Hood River lines, begun in 1906, and doing "an exceptional business in the sale of electric power for irrigation." The Southern California Edison Company was planning to tap its 10,000-volt line to serve farms along its right of way at 110-220 volts.



First Experimental Use of Electric Power

"It is an interesting fact that the first serious experimental use of electric power on the farm was for plowing, while the first real installation in regular operation was a hoist for handling beets in a sugar factory. These early applications . . . were made in 1878. And it is significant that of these first farm applications, only the electric power hoist remains today. The vision of the practical electric plow was shattered long ago with the development of the tractor."

Also in 1912 came the regular quinquennial report of the Census Bureau on the electric industry, which included for the first time a section on farm use. The bureau found that the variety of uses to which electricity could be put on the farm was "surprising," and referred to fifty farmhouse uses, thirty applications for motors to barn and field machinery, and twenty dairy uses listed by the NELA committee. This count did not include certain specialties, such as canning, milling, etc. The bureau concluded:

> The use of electricity on the farm has been pursued and developed with extraordinary rapidity in recent years. The chief reasons are the extension of power transmission circuits from central stations in cities and the establishment of distribution networks in connection with hydroelectric enterprises, looking for patronage of every description.

About this time some noteworthy farm installations appeared in the West, where the irrigation problem had long been especially inviting for electrification. The Census Bureau's 1912 report had said of western irrigation, "the aggressive policy of certain central stations in building the necessary pole lines to reach such loads has resulted in many interesting and very profitable installations of motor-driven pumps."

For example, M. A. Lunn, near Denver, Colorado, successfully irrigated 80 acres of arid land with a 35-horsepower, 3-phase, 220-volt motor, belted to a centrifugal pump. Power was obtained from the Northern Colorado Power Company's 13,000-volt line, the voltage being knocked down at the pumphouse. The same company served a larger territory just east of the foothills of the Rockies, and had boldly embarked on a widespread program of selling power for irrigation. Running lines on wooden poles, 40 to the mile, this company had substations and switching stations 20 miles apart, arranged so that any substation could be cut out without interrupting service.

This company also gathered some cost data on 57 pumping plants in 1910. It found that to irrigate 160 acres, lifting a 25-foot head of water, an average of $7.45 per acre was required. Operating costs varied from $1.75 to $2.25 per acre-foot (*i. e.*, a foot of artificial rainfall per acre). During the same period the rich farming lands of Sacramento and San Joaquin valley, California, were being developed by 60 miles of secondary lines built by the Western States Gas & Electric Company, serving about 700 ranchers with a load of nearly 2,000 horsepower. This network cost $90,000, or $1,500 per mile, and the quality of the service received special praise from the Census Bureau. Rates descended ½ cent per kilowatt hour for every block of 1,000 kilowatt hours—from a primary block of 3 cents to 1½ cents.

No such rapid and large-scale development was possible in the Middle West and East, where farm use was confined to a few light bulbs and, possibly, the use of a small motor for a few hours a week. However, the 1911 meeting of the Illinois State Electrical Association brought news of a 30-mile line out of Elmwood, Illinois (operated by E. L. Brown), serving 8 small towns and about 50 farms. R. H. Abbott of Petersburg told the same meeting about service to farmers along the route of a 16,500-volt, single-phase transmission line, with step-down transformers lowering to 2,400 volts for primary distribution.

In most of the Illinois experiments the line equipment was owned by the customers, who also furnished the right of way in return for guaranteed service at town rates, with a minimum bill of $2 a month. Some of the farmers hauled and erected the line poles themselves and many of them bought numerous appliances.

Iron wire was used for secondary lines in these early Illinois operations, which were remarkable for their experiments with low-cost materials. One operator constructed 32 miles of 1,000-volt line, at a cost of $150-$200 a mile, using a No. 6, hard-drawn copper wire on 30-foot poles. Another successfully operated a 7-horsepower motor at the end of a mile of 2,200-volt line, using a No. 10 iron wire. Similar practices were discussed at the 1911 Illinois meeting.

Some experience with electrically powered irrigation pumping in New England was noted in the very dry summer of 1912, when the Boston Edison Company replaced a steam pump at Arlington, Massachusetts, with a 25-horsepower motor driving a centrifugal pump, pumping 200 gallons a minute against 90-pound pressure, at a cost of about $4 per acre per month.

However, irrigation in this region could obviously never be the load builder that it was in the West; so that eastern utilities based their rural campaigns on new uses for electricity. In 1912 a "farm circus" was sponsored by the Boston Edison Company, which toured rural Massachusetts, demonstrating thirty-three electrified farm machines. The exhibit was apparently the early prototype of the Demonstration of Farm Equipment Tour — now one of the REA's most publicized promotional activities.

The eastern farmers responded to this promotion, as evidenced by the shutting down of six old wind-

mills, following the extension of a mile-and-one-half, 2,500-volt circuit out of Poughkeepsie, New York, in 1910 to serve about thirty-five farms. Dairy and poultry farms found electric power especially serviceable.

The electrical manufacturers contributed their part in the testing and development of farm machinery. In 1911 the General Electric Company demonstrated on a farm near Dayton, Ohio, that the cost of grinding 4,000 bushels of corn could be cut from $308 to $160 with electric power, figured at 5 cents per kilowatt hour (although the actual rate in force was 3 cents).

There was little regulation of early rural electric service by the state utility commissions beyond the approval of special rates proposed by the utilities. Such rates were generally based on demand and gave the benefit of off-peak use and large-scale consumption. The Truckee River General Electric Company, for example, charged for irrigation purposes from 1.2 to 1.7 cents per kilowatt hour, plus 50 cents per month for each rated motor horsepower. The first formal commission ruling affecting rural electric rates appears to have been a decision of the Wisconsin commission in 1915 that rural customers must bear line construction cost, but that companies must provide individual service equipment.

A number of solutions had been attempted to solve the vexatious problem of line construction costs. In many cases the revenue prospects were hopelessly out of line with cost figures. Yet, utilities disliked to see the business getting away from them, and the farmers themselves preferred central station service. Some companies bore the cost even in the face of almost certain deficits. Others required the farm customers to bear the burden of the entire outlay. And there were a variety of share-cost plans. Experimentation with less expensive material was generally unsatisfactory.

THE NELA Subcommittee on Farm Line Construction in 1921 discouraged the sacrifice of high standards of service by cheap construction methods—especially the use of iron wire. The regulation of iron circuits even for small electric loads was so poor, the committee found, that copper was being steadily substituted. Span lengths varied from 125 to 400 feet between poles (the longest being in the southern Pacific coast section). The report concluded that there was need for the development of specifications for rural construction, designed to lower costs without endangering service, although sufficient data were not yet available to warrant formulation of general standards.

In the field of rate making, there was

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also a great deal of experimentation going on. One of the first rural rate formulae to pass beyond the realm of hope and conjecture was a plan submitted in 1921 by a committee of the Wisconsin Electric Association, which recommended a regular city rate plus a "rural charge." This rural charge was to equal each year 10 per cent of construction costs, plus transformer losses (figured at cost of energy) minus 27 per cent of annual revenues from the extension which would have resulted from the application of regular city rates.

The theory of this plan was that the 10 per cent addition represented the depreciation, taxes, excess operating ex- among all rural customers, while the 27 per cent subtraction would have covered the fixed charges included in city rates. Half of this total annual charge was to be apportioned equally among all rural customers, while the other half was to be apportioned according to installed capacity of each customer. In a study made up of seven lines surveyed by the Wisconsin committee, the average monthly charge per customer would have been $3.44.

INCIDENTALLY, the studies of this 1921 Wisconsin Association committee give us more fairly comprehensive data on early rural service costs. Seven out of eight rural lines surveyed by the committee served 161 customers, averaging 2.57 per mile, over a total of 62.57 miles. The average per-mile construction cost was $1,225.57. There were 37 miles of iron wire and over 25 miles of copper wire. On the latter basis, the average cost of iron lines was $991.76; and of copper lines, $1,563.90.

However, the scientific Wisconsin committee plan was not widely used for one reason or another. Thus, the NELA Rural Lines Committee in 1922 reported that "a large per cent of the rural customers now being served are receiving service at less than cost."

As to the actual rural rate structures used prior to 1924, they varied so widely between geographic regions and even between neighboring systems, that many of them bore little relation to true operating costs.

A 1938 study by the Department of Agriculture estimated that during the period 1910-14, the average farm household rate was 10.3 cents per kilowatt hour for forty hours' monthly use, and the average farm power rate was 7.5 cents for sixty hours' farm use, making an average of 8.62 cents for total consumption. By 1924, the department found that this average rate had dropped to 8.58 cents.[2]

Summing up this first phase of rural electrification in the United States, three major facts had emerged by 1923:

1. The cost of rural lines and equipment must be as low as possible without sacrificing service standards.

2. Rate cutting and service expansion in rural areas could only be attained in the same way as in urban areas — by increased per-customer usage.

3. To obtain increased usage, coördinated research, experimentation,

[2] However, these estimates, which were based on partial data obtained in 1933 by the FPC, were derived from complicated weighted calculations to supply average figures which must be regarded as highly suppositious ("Income Parity for Agriculture," Part III, § 2, 1938). The Edison Electric Institute showed an average revenue per kilowatt hour for residential service of 8.30 cents in 1917 and 7.20 cents in 1924 (EEI *Statistical Bulletin* No. 7, 1939, Table 14).

and promotion in farm usage of electricity were required.

In the year 1923, the Committee on the Relation of Electricity to Agriculture was established, as a result of a 1922 proposal by the NELA Rural Lines Committee to the American Farm Bureau Federation for a coöperative organization to study the problem and make information available. Farm associations, agricultural colleges, equipment manufacturers, women's clubs, and Federal departments joined in the work of this committee. For the succeeding twelve years, this body, known as the CREA, was the major force in the program of farm electric work over all America. Its establishment marked the beginning of the second phase and a turning point in the history of rural electrification in the United States.

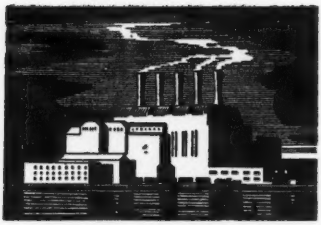
If the achievements of this pioneer period had provided only a start, it was a good start and a sound start. Many utility companies had accumulated technical and service experience which, pooled through the trade associations of the industry, was invaluable in indicating the direction that further expansion of farm service should take. The economy and convenience of electric power had been practically demonstrated to hundreds of thousands of farmers and the number of farm electric applications was constantly being increased.

In 1924, eighteen years after the building of the first Hood River line, the total number of farms receiving central station electric service was 204,780. Although this was only 3.2 per cent of all farms in the country, it should be remembered that the period covered was the *beginning* of rural service. At the end of a comparable period in urban electrification (1882-1900) the proportion of urban homes being served was 3.4 per cent, although the conditions for growth were much more favorable in towns. Electric service in towns had grown slowly during its first two decades, faster in the third, then reached a "boom" rate in the fourth and fifth. The electrification of rural areas was to follow a similar pattern.

The second article in this series will appear in the next issue.

Wires by Telephone

Irked by delivery of a telegram by telephone, a Massachusetts man recently inquired of the Federal Communications Commission as to regulations covering such practice. He was advised that the telegraph companies file schedules covering charges and regulations with the commission. There is no departure from these unless the commission finds them unreasonable, discriminatory, or otherwise in violation of the Communications Act. The tariff of the telegraph company concerned provides that "messages will be delivered by telephone when prompt messenger service is not available, or when the addressee is located in a distant part of the community." The company does not necessarily have to deliver a telegram marked "personal" to the individual to whom it is addressed. The tariff provides further: "If the sender desires a message delivered or not delivered by telephone, the words 'Phone' or 'Don't Phone' should be added after the addressee's name. These words will not be charged for."



Who Own the Utilities?

In a very real sense, declares the author, the people own them

By ALBERT W. ATWOOD

For years before the depression it was one of the proudest boasts of the large American corporation that it rested upon a broad foundation of ownership. Many companies, of which United States Steel and American Telephone and Telegraph might be considered typical, gave out quantities of information concerning the number of their stockholders and the classification of the same by sex, state of residence, amount of shares held, and, in some cases, by occupations. Newspapers and magazines were filled with articles lauding the effects of widespread ownership, and a Harvard professor even wrote a book describing it as a benevolent revolution.

Of all the industries involved probably none laid greater stress upon the virtues of widespread ownership than did the utilities. In state after state and city after city operating companies carried on campaigns to sell stock direct to both employees and customers, a practice which was soon followed by a number of holding companies, good, bad, and indifferent. Indeed for a time "customer ownership" became one of the fetishes of the industry.

There is no doubt that it was pushed to exaggerated lengths in the boom period. Not all companies which went in for it were ably or wisely managed. Holding companies which had huge capital structures dependent upon dividends from common stocks of operating companies naturally got into difficulties. Even the theory of "customer ownership" had its flaws. No utility, even in the best of times, could hope to induce all of its customers to become stockholders, and, even if it did, there would still be a conflict of interest, because consumers and stockholders do not necessarily seek the same objects.

The bank failures of 1932-1933, the melting of real estate values, the failures and foreclosures in business generally, and finally the long period of shrunken profits and unemployment—all these tended to drive "customer ownership" out of fashion. Corporations do not boast of their extended stockholders' lists when dividends are

not being paid, and the New Deal's drastic legislation for holding companies, together with the setting up of the government in competition with the utilities, did not help a bit.

On top of all this the whole emphasis shifted from individual savings and old-fashioned thrift to Social Security and dependence upon government action. No longer were we told of opportunity and the virtues of self-reliance; the theme song changed to the underprivileged one-third—ill fed, ill housed, and ill clothed.

For a number of years the only notice which widespread corporate ownership received was an unfavorable one. In 1932 Berle and Means wrote "The Modern Corporation and Private Property," the first of countless books stressing the point that dispersed ownership makes for concentration of financial control and self-perpetuation of management.

But time passes on; the pendulum begins to swing in the other direction. The fact is, speaking broadly, that very large segments, not only of the utility industry but of many other basic industries, have come through the depression and the effects of adverse legislation, with a remarkable degree of stability. Many dividends were reduced or passed for a few years and stocks dipped to exceedingly low levels. But this has been followed by revival and restoration.

In respect to utilities in particular the "customer ownership" movement, with exceptions, concerned itself to a large extent with the sale of the preferred stocks of operating companies, and their record through the depression has been one of which the industry need not be ashamed. For that matter total dividends paid by all electrical utilities have not varied greatly over a considerable period of years.

At any rate the significant fact is that the underlying, long-range trend of industry, and particularly of the utilities, is to spread out over wider and wider areas of ownership, regardless of booms and depressions. This does not mean that the stockholders' list of every large corporation rises steadily each year. There are years in which decreases occur; there are all kinds of incidental ups and downs. For instance, one of the largest of the integrated operating utilities, which has nearly 100,000 stockholders, showed an increase of 690 in 1938 and a decrease of 85 in 1939.

But if we bear in mind that there is no longer a conscious "customer ownership" drive or any other kind of organized ownership movement, the tendency would appear to be unmistakable. This is best shown by the number of stockholders reported at the end of the following years by the American Telephone and Telegraph Co.:

1900	7,500
1905	17,500
1910	40,400
1915	65,500
1920	139,400
1925	362,179
1930	567,694
1931	644,903
1932	700,851
1933	681,000
1934	675,000
1935	657,465
1936	640,991
1937	641,686
1938	646,882
1939	636,771

It should be realized that constant replacements are required to maintain any stockholders' list. In the case of the AT&T 5,500 accounts are closed

out yearly because of death and the distribution of estates alone. Also there are always many who sell because they need the money, and this number must have been very great in the depression years from 1932 to 1937.

OBVIOUSLY, the huge total of 700,851 stockholders in 1932 marked the culmination, as it were, of the frenzy to buy stocks which gripped the whole country in 1928 and 1929, for at that time it was freely predicted that AT&T, which the coldly calculating have usually valued at about 150, would soon go to 500 or 600. Instead it reached a low of 70¼. Considering all the circumstances, it is remarkable that at the end of 1939 there were only 75,400 fewer stockholders than at the 1932 peak.

But to this writer the most striking tendency in utility ownership is not that the total number of stockholders is increasing but that an ever-mounting stake in ownership is passing into the hands of institutions, primarily of the type which represents security, public welfare, and enlightenment.

It does not follow necessarily that even this development is altogether wholesome; it contains dangers of its own. In the January 30th issue of PUBLIC UTILITIES FORTNIGHTLY,[1] Fergus J. McDiarmid, in an article on the pros and cons of private sales of utility bonds to big life insurance companies, raised the pertinent question as to whether utilities in the West and South will have any political friends left when the insurance companies in the Northeast control them and there is not a single local investor remaining.

One answer to this is that the great life insurance companies in the northeastern section of the country are, in many instances, forbidden by state law to buy common stocks, and might not do so even if the law were changed. Besides, there is still very extensive local ownership of utility stocks.

Three-quarters of all stockholders of the Pacific Gas & Electric Company are residents of California, and 55 per cent of the common and 77 per cent of the preferred stockholders of the United Gas Improvement Company live in Pennsylvania, even though the company has many properties outside that state. Or take a holding company like the North American Company. Its operating subsidiaries have nearly 50,000 preferred stockholders distributed throughout Missouri - Illinois - Iowa, Wisconsin - Michigan, Ohio, Kansas-

[1] Vol. 27, p. 143.

¶ "EACH *of the 3 largest life insurance companies owns nearly half a billion dollars of utility bonds. The 49 largest life insurance companies had 14.4 per cent of their assets in utility securities in 1940 as compared with 9.7 per cent in 1930. All the life insurance companies probably own at least 17 per cent of all outstanding utility bonds, although a much larger proportion of new utility issues are going to the life companies. In some cases nearly half of the bonds of a given utility are owned by them.*"

Missouri, and the District of Columbia.

THE main stake of the great life insurance companies in the utilities is their bonded debt, and this holding is, of course, very great. Each of the 3 largest life insurance companies owns nearly half a billion dollars of utility bonds. The 49 largest life insurance companies had 14.4 per cent of their assets in utility securities in 1940 as compared with 9.7 per cent in 1930. All the life insurance companies probably own at least 17 per cent of all outstanding utility bonds, although a much larger proportion of new utility issues are going to the life companies. In some cases nearly half of the bonds of a given utility are owned by them.

It is true also that one of the Canadian companies, the Sun Life, is the largest single owner of common and preferred stocks of utilities in the United States, and that several of the great life companies in New York are among the largest owners of utility preferreds.

The Sun Life is the largest single owner of American Telephone and Telegraph and Consolidated Edison of New York, holding more than half a million shares of the common stock of the latter company, according to the latest available reports. It also has very large holdings in Pacific Gas & Electric, preferred and common, and Columbia Gas & Electric, Commonwealth Edison, Detroit Edison, North American, Public Service of New Jersey, Southern California Edison, United Gas Improvement, Pacific Lighting, Boston Edison, and American Gas & Electric, as well as Montreal Light, Heat & Power.

But if the Sun Life has attempted to control any of the utilities in which it owns so much common stock, or if the Metropolitan, Equitable, and New York Life have tried to exercise control because of their holdings of preferred, no evidence thereof has come to public notice. For that matter the Sun Life is steadily reducing the proportion of its assets which are invested in common stocks.

QUITE regardless of such considerations we are confronted with a very persistent and apparently deep-seated tendency in the investment of individual savings; namely, the practice of investing indirectly rather than directly. Nowadays instead of buying bonds and stocks, as formerly, many a salaried man enters upon a program of extensive life insurance and retirement income. All studies show that the form of individual savings which has increased most rapidly in recent years has been that which goes into life insurance, annuities, and pensions.

Nor is it uncommon for the head of a family to devote 10 per cent, 15 per cent, or even 20 per cent of his income to this purpose. Thus, the life insurance companies are forced into the investment markets on a large scale, and when they buy a whole issue of bonds or 20,000 shares of preferred stock they are not purchasing it for a single large investor but for millions of small ones.

Moreover, important as the great life insurance company is in the present investment picture, it is only one of several different kinds of institutions which figure in the spread of utility ownership. There are the fire and casualty companies, the savings banks, investment trusts, schools, colleges,

The Small Stockholder

"ANY utility official will testify that the 'small stockholder' is a real and not a mythical figure. One utility which has paid its relatively generous dividends throughout the depression has received many letters from stockholders expressing their gratitude at the continued receipt of dividends. 'It was this dividend which enabled me to send my son to college,' is what many of them say."

universities, fraternal and social groups, pension funds, banks and trust companies as fiduciaries, and, if the term institutional can be stretched a little but not out of reason, individuals as trustees or guardians, and joint family ownership.

THERE are only some 300 life insurance companies in the United States, and yet to take two utility companies at random, the North American Company has 1,500 institutions on its stockholders' list, not counting 2,900 trustees and guardians, and the Pacific Gas & Electric Co. has 2,352 different institutional holders. Among the owners of its preferred stock alone the Public Service Corporation of New Jersey has 63 fraternal organizations, 191 guardians, 3,914 trustees, 83 religious organizations, 72 charitable organizations, 81 educational organizations, and 145 insurance companies, of which many are presumably fire and casualty.

Or take a company like the Consolidated Gas, Electric Light & Power Co. of Baltimore. Several of the great life insurance companies are among its largest stockholders, but no less than thirteen colleges and universities, Amherst, Berea, Columbia, Harvard, Yale, Johns Hopkins, Knox, Mt. Holyoke, Rutgers, Trinity, Tufts, Rochester, and Williams, are also stockholders, the largest holding being one of 4,000 shares.

Or turn to Baltimore's neighboring city, the nation's capital, where the Washington Gas Light Co., serving the city and near-by Maryland and Virginia, has as its largest single stockholder, Harvard University, with a total holding of 7,000 shares. As a matter of fact Harvard has $26,000,000 invested in utility bonds, spread over 200 different issues, and more than $6,000,000 in fifty different utility preferred stocks.

Harvard also has no less than 18,000 shares of a single utility common, Commonwealth Edison, and holdings of from 5,000 to 9,000 shares in such companies as AT&T, Public Service of New Jersey, Pacific Gas & Electric, Southern California Edison, and Con-

solidated Gas & Electric of Baltimore, not to mention over 30,000 shares of General Electric. Harvard's sister university, Yale, has 92,500 shares of the preferred stocks of different utilities, and $13,200,000 in different bonds of the same industry.

PRACTICALLY all the philanthropic and educational foundations have large investments in utilities. A few years ago only six out of thirty leading foundations had less than 10 per cent of their assets in utilities, and the average composite fund showed 23.40 per cent invested in this way.

A study made a few years ago showed that among the bondholders and stockholders of the various operating utilities in the TVA region were no less than 53 life insurance companies, 112 other insurance companies, 35 investment trusts, 16 universities, schools, and social funds, 47 savings banks, 5 fraternal organizations, and 3 religious, charitable, and retirement funds.

Of one fact concerning the ownership of utilities we may be sure; namely, that to a constantly increasing extent the larger stockholders, as well as bondholders, are institutions. Only 681 of the 96,000 stockholders of the Pacific Gas & Electric Company have 1,000 shares or more, and according to the company "by far the greater number of these" are institutional, "representing the collective interest in our securities of an unknown but vastly larger number of people (than the 96,000) whose savings are invested in insurance policies, bank deposits, and the shares of other corporations."

In the case of Commonwealth Edison 1 per cent of the number of stockholders own 33 per cent of the stock and 5.1 per cent of AT&T stockholders own 50.5 per cent of the total number of shares. But the relatively small group of large owners are almost entirely institutional, holding securities in trust for millions of individuals. Moreover, in the case of AT&T 5.1 per cent is 33,938, which is an impressive number in itself.

But it would be a mistake to get the idea that the individual stockholder, the "small investor," is no longer of importance in our utility corporations. With large corporations in general women constitute about 40 per cent of the total number of stockholders and own about 22 per cent of the stock.

WE have no breakdown for the utilities as a whole, but individual cases are of interest. AT&T has 360,466 women stockholders, or 57.1 per cent of the total number, as compared with 30 per cent men. Consolidated Edison has 51 per cent women and 34 per cent men; Pacific Gas & Electric 46 per cent women and 32.3 per cent men. Commonwealth Edison has 42 per cent women and they own 21 per cent of the stock. North American Co. has 50 per cent women. Washington Gas Light Co. has 50 per cent women and they own 22 per cent of the stock.

In addition, the joint account or joint tenancy item in utility stockholders' lists shows what an important factor women are. The AT&T has 44,650 of such accounts. Pacific Gas & Electric has 18,440 of them, or 19.2 per cent of its total stockholders. In the case of Commonwealth Edison "joint tenancies and trust estates" account for 21 per cent of the total number and own 21 per cent of the total shares.

To a peculiar extent an account in a woman's name or as a joint tenant typifies the small or relatively small saver and investor. This is so, for one reason, because there are relatively few women who have large salaries or who make fortunes or who even inherit very large ones, although many women inherit moderate amounts. When a man buys 1,000 shares of stock it is usually because he has made a killing in his business. When 25 or 50 shares of stock are bought in a woman's name or for joint account it means that the woman has either had a modest inheritance or has saved the money, alone or jointly with her husband.

Then, too, the accounts on stockholders' lists in women's names do not turn over nearly so fast as those of men. In one of the largest of the utilities the average annual turnover a few years ago was only 9 per cent for women as compared with 16 per cent for men.

JUST how important the small stockholder is constitutes one of the really moot questions of corporate policy and modern finance. Figures are most misleading. It sounds very well to say that AT&T has 211,078 stockholders with 5 shares or less; such a statement gives the impression that these shareholders are necessarily small savers. Such may be the case, or may not be the case. A man may own 5 shares of AT&T and receive a salary of $100,000 as a movie magnate.

In other words we have no method of eliminating duplications. We do not know how many of the 9,576 owners of 5 shares or less of Pacific Gas & Electric are to be found among the 211,078 of AT&T, or on many hundreds of other stockholders' lists.

On the other hand, common sense indicates that there must be distinct limits to this process of duplication. Three-quarters of Pacific Gas & Electric's 96,000 stockholders live in California and it is not likely that many of them are the same individuals who constitute the 11,800 names on the list of the Hartford Electric Co. Nor are many of the 15,767 names on the list of Pacific Lighting likely to be the same as the 13,796 on that of the People's Gas Light of Chicago.

Any utility official will testify that the "small stockholder" is a real and not a mythical figure. One utility which has paid its relatively generous dividends throughout the depression has received many letters from stockholders expressing their gratitude at the continued receipt of dividends. "It was this dividend which enabled me to

¶ "WITH *large corporations in general women constitute about 40 per cent of the total number of stockholders and own about 22 per cent of the stock. . . . AT&T has 360,466 women stockholders, or 57.1 per cent of the total number, as compared with 30 per cent men. Consolidated Edison has 51 per cent women and 34 per cent men, Pacific Gas & Electric 46 per cent women and 32.3 per cent men. Commonwealth Edison has 42 per cent women and they own 21 per cent of the stock.*"

send my son to college," is what many of them say.

It is the modest boast of the country's largest utility corporation that its ownership is a very fair and accurate cross section of the distribution of wealth in this country. The same statement could be made for most of the utility industry. But a fair, unbiased study of utility ownership reveals much more than that. It shows that the distribution of wealth, while not as widespread as the overenthusiastic promoters of the twenties once tried to make out, is nevertheless far more thorough than has been asserted or admitted by the pessimists of the thirties.

Examined in this light, the ownership of so-called "private utilities" is not private at all. It is merely a special form of public ownership operated under public regulation but without political management. And because it is a voluntary sort of investment, it represents, in a sense, a truer type of industrial democracy than the political form of utility ownership which may be thrust upon the tax-paying citizens without their individual consent.

A shift, therefore, in the ownership of utilities from this voluntary investment to political control constitutes not so much a change from private to public ownership as a change from ownership by the public organized in one way to ownership by the public organized in a different way. In the first instance, the public is composed of individual investors, bank investors, insurance policyholders, fraternal, religious, educational, and charitable supporters. In the second instance, the public is composed of voters and taxpayers. In the process of any such change, of course, the management shifts from one executive group sensitive to the public organized in the first manner to a more politically sensitive group.

To the extent that any financial benefits might be diverted, through such a change, to the tax-paying and rate-paying public, it would follow that just about the same amount of benefit must be subtracted from the institutional supporting group. There may be offsets in the form of tax losses, salaries, etc., but on the whole the shift would pretty nearly even up. Now, it may well be socially desirable that such a shift should occur. We need not go into that here. But in fairness to all sections of the public, however organized, the true situation and probable effects of any alteration in the utility status should at least be recognized and considered. Unfortunately, it is not a situation which has received very much attention in the voluminous literature and debates on utility regulation and ownership.

"Every *natural gas man knows, or believes, that the gas supply . . . is well-nigh inexhaustible. But when he is called upon to prove his contention he reaches in vain for the facts that would aid him. Enemies of natural gas extension (and they are not by any means all in the coal industry) may claim that in twenty years or in thirty years the natural gas supply will be exhausted. Everyone knows such claims are false, but no one can satisfactorily prove otherwise.*"

—Editorial Statement,
Gas magazine.

Can the Continuing Property Records Pay Their Way?

The author thinks they can and makes a constructive appraisal of their potentialities

By JOSEPH B. KLAINER

For the past several years a considerable section of the utility industry has been grappling with the problem of Continuing Property Records. Faced at a time of retrenchment with the large cost this involved, the idea was not at first accepted with very good grace. The actual undertaking of the problem and the efforts of finding practical solutions have, however, changed the initial reluctance to a more sympathetic acceptance of the general idea of Continuing Property Records and a desire to utilize their potential value.

At the present time, with a large number of utility companies having completed the establishment of the record and starting to consider its effective maintenance, the question may well be put, "How can the information which is made available through Continuing Property Records be so utilized as to compensate for the large initial nonrecurring cost and for the much smaller continuing expense?"

In a previous article the writer has developed the general principles of establishing and maintaining Continuing Property Records as a means for more automatic regulatory procedure. This purpose alone, however, is hardly sufficient to warrant the expenditure necessary to perpetuate accurate and detailed Continuing Property Record information. There must be an effective utilization of these facts in carrying out the functions of management if the Record is to be other than an expensive burden maintained only because of regulatory requirement and satisfactory only for that purpose.

It may be said that the tragedy of Continuing Property Records is that their hastened realization has been the result of regulatory requirement rather than of the slower normal development in the constant search of management for aids in carrying out its responsibilities most effectively. Consequently, altogether too much stress has

been put from the start on the cost of compiling the record and perpetuating it, and too little on the basic value of the available information because of its potential uses. The very size of the initial undertaking has given rise to exaggerated estimates of cost which have outweighed all other considerations. The primary emphasis has been on decreasing the cost of the work by eliminating all possible refinements while the approach has been based on the premise that there is little value to the Record from the standpoint of the company itself.

The time is definitely at hand to reverse this emphasis. The initial expenditure has most likely already been incurred by most of the utilities and the continuing cost is being found very much less than the original estimates. Management has now two alternatives. It can adopt the passive attitude of accepting the Record as a necessary burden and seek to maintain it in just enough detail and accuracy barely to satisfy the regulatory requirements. Or it can actively insist that the Record pay its own way, and give it the standing and weight that it must have to make this possible. The extent to which this is possible depends almost entirely on the formulation of definite plans and procedures to utilize effectively the wealth of information made available by a properly maintained Continuing Property Record.

Naturally the particular circumstances which characterize a company's operations will determine the particular management functions which can utilize the Continuing Property Record information to good advantage. Several suggestions can, however, be outlined as generally applicable. And, once emphasis is properly directed with an active interest along these lines, many unexpected uses of varying importance will continually suggest themselves.

PROBABLY the most immediate utilization of Continuing Property Record information from the standpoint of tangible benefits is in connection with determining the proper amount of insurance protection against property damage. Such insurance is necessarily placed piecemeal as a company's property is extended and renovated. Comparisons of final construction costs are not usually made and surveys of the overall insurance situation are only infrequently undertaken. The net result from the patchwork of figures which serves as the basis for the rounded amount of insurance coverage carried may well be considerably different from the adequate protection which it is the management's duty to provide. If there is an inadequate coverage, the company's interests are being exposed to an unnecessary risk and the management is definitely responsible. If there is, on the other hand, an excessive coverage, company funds are being expended without obtaining equivalent protection.

The determination of the proper amount of insurance coverage requires a critical examination of several factors in connection with which basic property information, both as to inventory and as to cost, is vital. At the outset there is the question as to what property is sufficiently concentrated to warrant providing insurance protection.

A considerable portion of a company's property may be sufficiently

scattered as to location to make it advisable to accept the risk of individual damage. This segregation will not necessarily follow the grouping by property accounts so that mere money balances are not sufficient for proper decision.

WITH respect to property sufficiently concentrated to be covered by insurance two further questions arise. Certain portions of such property may not be considered by insurance companies as insurable. Several rules of thumb have been evolved over a period of time, as, for instance, the 10 per cent rule for building foundations. Such rules, however, long outlive their usefulness before major events force their revision. There may also be a considerable variation in insurance rates between different broad classifications of property such as buildings, on the one hand, and their contents on the other. Here, again, the accounting grouping by property classifications is not always controlling.

The very act of carrying insurance presupposes the contingency of being faced with the necessity of producing as proof of claim for damage suffered a detailed listing of the property involved. Remote as this possibility may be, the responsibility rests squarely on the management for any loss not recovered because of omissions and inadequacies of descriptions in such listings.

A FURTHER element involved in determining proper insurance coverage is the effect of changes in price levels over a period of time. The insurance compensation for the damage must be sufficient to permit the company to make an equivalent replacement of its property. Consequently, any important shift in price level must be given its due consideration.

With respect to each of these questions, the management is definitely better fitted to arrive at competent decisions if it has at hand accurate continuing information in sufficient detail as to the property it is seeking to protect.

The Continuing Property Record is the basic source for this information. With a little foresightedness it can be designed to incorporate all of the necessary detail at a negligible additional cost.

The writer has found through his personal contact with the design and operation of Continuing Property Record systems that there is a definite need for such information and that it can be made readily available as an integral part of the Continuing Property Record.

¶ "MANAGEMENT *has the responsibility of insisting on the best possible accuracy with respect to the cost of construction work before making its decision whether or not to authorize it. The availability of accurate and detailed inventory and cost information and a strict insistence that it be used as a guide for future estimating will compel a more objective approach which will result in estimates much nearer the final costs.*"

THE problem of depreciation is so definitely associated with a company's physical property that the value of adequate property records for this purpose need hardly be stressed. A definite general departure has been made from the convenient accrual rules based on percentages of revenue or on units of commodity. These were designed to result in an approximation of the estimated or desired depreciation expense. There has also been a reluctance to remain content with the application of accepted depreciation percentage rates for various standard physical property classifications without regard to their applicability to the particular facts.

While there is considerable difference of opinion as to the proper method for determining the amount of depreciation already suffered and the periodic provision for the continuing depreciation, each of the various methods advocated requires the information provided by a Continuing Property Record. This Record with its detailed data as to the age of retired property provides the basis for sound actuarial studies of service lives. With its classified detail of additions and retirements as to functional and physical property groups and as to the ages of property remaining in service, it makes available the fundamental data for different types of depreciation computation which utilize turn-over methods including the recently presented asymptotic method, or for the engineering determination of actual depreciation.

THE taxing authorities, themselves responsible for the wide acceptance of standard percentage rates, are no longer so ready to accept such depreciation expense figures. They have, in fact, indicated a definite desire for proof of claimed amounts and for a more direct and continuing relation to the property involved. Consequently, the management is faced with assuming the burden of proof with respect to its depreciation expense and accrual figures. It cannot support this burden of proof without adequate detailed and continuing information about the property suffering the claimed depreciation. As a result, it may find itself faced with a considerable expenditure to undertake a special study for obtaining the necessary information. Or it may find it necessary to effect a compromise prejudicial to the company's interest in order to avoid such expenditure. It may well be that the availability of the detail of property as contained in an adequate Continuing Property Record will in an individual case go a long way towards compensating for the large initial cost of establishing the Record.

The writer has himself only recently been called upon to furnish just such information under circumstances which emphasized its value and importance.

PROBABLY one of the most troublesome problems with which management has to contend is that of estimating the cost of recommended construction and resolving the reasons for the variations between the final costs and the previous estimates. Naturally the emphasis of the engineers preparing such estimates is upon carrying out the work at a minimum cost. Consequently, they are prone to underestimate and to proceed on the assumption of getting

Sale of Portions of Systems

"UTILITY companies are continually faced with political pressure to sell portions of their systems to municipal bodies or face competition or loss of franchise. At times such pressure results from a conviction that the community can best serve itself. More often, however, the motive is either purely political or for the purpose of forcing reductions in rates."

"all the breaks" during the course of the work. Subsequently, when it becomes clearly evident that the original estimate is inadequate there usually is no choice but to authorize the additional expenditures to complete the project.

Management has the responsibility of insisting on the best possible accuracy with respect to the cost of construction work before making its decision whether or not to authorize it. The availability of accurate and detailed inventory and cost information and a strict insistence that it be used as a guide for future estimating will compel a more objective approach which will result in estimates much nearer the final costs.

A further insistence upon a thorough analysis in the case of persisting major differences, followed up by necessary revisions of methods, will produce consistently closer approximations of actual costs of construction.

IN this connection the Continuing Property Record system can be utilized as a means of critical survey of construction expenditures. The analysis required for determining the physical inventory of property units and their associated costs in the detail requisite for the Continuing Property Record is bound to bring out the construction facts and to reduce them to the common denominator of money. An analysis personnel of sufficiently high caliber which is authorized to assume the responsibility of questioning evident departures from normal can be of considerable value in emphasizing such conditions for the management's attention.

The writer has had occasion to observe a number of such instances which should definitely have been brought to the notice of the executives. Invariably, however, the employees entrusted with the Continuing Property Record analysis work were not charged with any

such responsibility and they were generally too overawed by the importance of the operating departments to give much thought to a critical consideration of the cost of construction.

THERE has been a noticeable and growing tendency to give increasing weight to the cost of property in the fixing of contract rates. The property used for serving a particular contract customer will include certain units of property devoted exclusively to his service and some portion of all other property which is utilized for serving all of the company's customers. The determination of the proportionate property cost in a particular case is a specialized problem requiring adequate and accurate information both as to inventory and as to cost. The availability of such information in the details of a Continuing Property Record will eliminate a great deal of guesswork and its utilization will leave all parties concerned much better satisfied with the results.

A somewhat similar problem is concerned in connection with the joint use of facilities by a parent company and its subsidiaries or by independent companies. Usually the various costs of owning and operating such facilities are paid by one company which, in turn, is reimbursed by the others in proportion to the extent of their use. Involved in this reimbursement are naturally a portion of the insurance cost, depreciation expense, and return on the investment.

As to each of these, the basic information for determining the amount of reimbursement is an accurate and detailed inventory of the joint facilities and their costs.

IN the past, reliance for such information has often been placed on special studies revised at frequent intervals. Aside from their comparatively large cost, such studies are too static and so do not reflect the continuing construction changes in the joint facilities. With the much closer scrutiny to which such arrangements are being subjected by regulatory bodies, an authoritative, flexible, and up-to-date source for this information must be substituted for such special studies. This need is entirely met by the information made available in the Continuing Property Record.

The writer has made various calculations with respect to apportioning the costs of the use of joint facilities and has had occasion to depend for the basic inventory and cost information both on special studies and on complete Continuing Property Record information. His experience definitely indicates that the utilization of the Continuing Property Record for the source of basic information will mean a much greater ease in making the calculations involved and a more definite reliance on the results.

UTILITY companies are continually faced with political pressure to sell portions of their systems to municipal bodies or face competition or loss of franchise. At times such pressure results from a conviction that the community can best serve itself. More often, however, the motive is either purely political or for the purpose of forcing reductions in rates.

A number of state legislatures have prescribed the specific procedure which must be followed by municipalities in such cases. These procedures protect

the investment of the utility company by requiring negotiations for the acquisition of its property. Naturally the value of such property becomes a question of prime importance and understandable differences of opinion result. It is elementary that the company must know what it has to sell, and how much its cost was, if it is to carry on such negotiations intelligently. The immediate availability of this information in accurate and complete detail within the Continuing Property Record greatly strengthens the company's position. This is particularly true where negotiations for purchase are being pressed purely for their political value.

THE consistent expansion of the scope of regulatory jurisdiction has resulted in more detailed and more continuous contact between the various regulatory authorities and utility companies. The regulatory authorities are no longer content to depend entirely upon the periodic reports which they require to be filed. They supplement such reports with investigations by their own field staffs of technicians, such as valuation engineers, accountants, and rate analysts. Such investigations generally concern themselves with a critical survey of cost of property changes and a determination of variations in the used and useful property. The information maintained in the Continuing Property Record is basic for the prosecution of these examinations. The cost of maintaining such staffs, which in the case of some regulatory commissions is quite considerable, is generally passed on to the utilities by assessment. Consequently, in so far as a company can assist such field examinations, it is making a direct saving in its assessment. This saving is a definitely tangible item which may go a long way towards approaching the cost of maintaining an adequate Continuing Property Record.

IT must also be kept in mind that during the progress of such an investigation there is the attendant burden of the time of the utility's own organization required to take care of the numerous inquiries which are made by the examining staff. It is difficult to evaluate this expense since the demand is intermittent and does not lend itself to cost segregation. From his own experience the writer is convinced that the burden is considerable. Consequently, in so far as the period of the investigation is shortened, there will result the additional savings of the efforts of the company's own personnel.

A further point should be made with

¶ "THE *establishment and maintenance of the Continuing Property Record should be planned so as to give all departments a thorough understanding of just what information is available and what procedures are necessary to obtain it and to perpetuate it. To some particular department this understanding may well be a revelation. To all departments it will be an education which will instigate a serious desire and intention to do their own jobs better by utilizing the Continuing Property Record data.*"

respect to the continually increasing number of reports required by regulatory bodies. These reports tend to become more voluminous and more detailed in the information requested. Their compilation represents a considerable cost some of which, at least, can be saved by having inventory and cost information with respect to property readily available in an adequate Continuing Property Record.

UTILITY companies are always faced with the possibility of formal rate case hearings. While it must be conceded that the phrase "nobody wins a war" is aptly applicable to a rate case, circumstances may arise under which each side in the controversy is definitely certain of the justice of its position and feels it imperative to maintain it.

It is, of course, not advisable to allow the form and detail of the Continuing Property Record to be governed entirely by the possibility of prospective reproduction cost studies. However, the maintaining of adequate cost and inventory information in the Record will result in a considerable saving in the cost of making such valuations when the need arises.

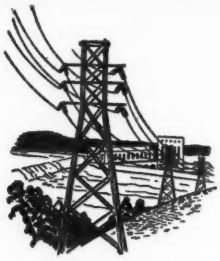
In a recent reproduction cost study which the writer assisted in preparing, the availability of a Continuing Property Record made it possible to eliminate practically all field inventory work. There resulted a consequent saving in the cost of the study which equaled several times the annual expense of maintaining the Record.

THE establishment of a Continuing Property Record for overhead distribution system property where there is a joint use of poles with other utilities will bring to light many situations of confused ownership which will have to be settled by arbitrary decisions. This confusion is the result of a lack of definite understanding over the period of the utility's growth as to the rights of each party concerned. There is involved in such cases either an excess investment or a loss of attachment rental revenue.

It is naturally not possible to determine where the gain or loss may have fallen over the period prior to the establishment of the Record. However, the ownership, once having been fixed, becomes definitely vital information if the company is to be properly reimbursed for the use of its property, and if it is not to be overbilled for its use of similar facilities owned by other utilities. The Continuing Property Record furnishes the best means for such accurate up-to-date information.

The thought may be expressed that in so far as certain needs for information are intermittent and possibly only prospective it is hardly advisable to provide for accumulating a great deal of data which may never be used or be referred to only occasionally. In such cases, it will be urged, special studies can be made when and if necessary.

This thought is basically sound where the accumulation of the data is purely for the purpose of meeting some possible subsequent requirement. Where, however, the basic information is maintained as part of a primary accounting record there is definite value in providing for its further refinement so that it can be suitable for such prospective needs. This may entirely eliminate special studies at future times or, at least, be of considerable assistance to them.



Joint Use of Poles with Other Utilities

"THE establishment of a Continuing Property Record for overhead distribution system property where there is a joint use of poles with other utilities will bring to light many situations of confused ownership which will have to be settled by arbitrary decisions. This confusion is the result of a lack of definite understanding over the period of the utility's growth as to the rights of each party concerned. There is involved in such cases either an excess investment or a loss of attachment rental revenue."

THE several uses suggested above for the profitable utilization of Continuing Property Record data in constructive management do not by any means exhaust the possibilities. They are merely the more generally applicable.

Within each company many uses and references of a more limited nature will be uncovered provided the information available is trustworthy and in sufficient detail; and provided further that there is a general knowledge of its nature and availability and a definite effort to utilize it.

The writer has found through personal experience that the employees of other departments are eager to avail themselves of the information contained in a Continuing Property Record once they are aware of its existence. Such employees will themselves suggest further constructive uses for the data.

To effect the widest possible utilization of the Continuing Property Record detail there must be a departure from the conception that the Record is purely an accounting matter and limited in its functioning to being the subledger for the Balance Sheet Account, "Plant in Service."

THIS change in viewpoint should be accompanied by a survey of the company's needs and practices for the purpose of determining all possible situations in which the Continuing Property Record can furnish basic data. If at all possible, such a survey should be made before deciding upon the specific Continuing Property Record forms and procedures. It will be found that certain details can be planned which

will make available more and better suited information at no additional cost.

In some instances some additional expenditure may well be decided upon to provide a refinement itself beyond the scope of the Record but advantageously integrated with it. An illustration of such a case is the segregation for insurance purposes.

The establishment and maintenance of the Continuing Property Record should be planned so as to give all departments a thorough understanding of just what information is available and what procedures are necessary to obtain it and to perpetuate it. To some particular department this understanding may well be a revelation. To all departments it will be an education which will instigate a serious desire and intention to do their own jobs better by utilizing the Continuing Property Record data.

SUCH results may at first thought be considered as only wishful thinking. The writer is, however, convinced that the possibilities definitely exist and need only proper encouragement to be developed to their fullest extent. There is little doubt that utilities are faced with the burden of cost involved in the establishment and maintenance of some sort of a Continuing Property Record. The difference in cost between a Record which is just satisfactory from the regulatory standpoint and one that can be utilized as a vital aid to management is surprisingly small. The difference in the value of the two Records from the company's standpoint is surprisingly large.

Unfortunately, the circumstances under which Continuing Property Records were conceived militated against an unbiased and constructive appraisal of their potentialities. However, this question has reached the stage where such an approach is vitally necessary and the utility industry as a whole should be ready to make it. Management must recognize and adopt this development whole-heartedly and utilize it to carry out its responsibilities more effectively.

Bottlenecks in Defense Program

"THE seriousness of the situation lies in the fact that we are rapidly approaching the time when the expansion of our war production will stop the expansion of our consumer goods production and will, in fact, begin to eat into it and perhaps actually reduce it. Under these conditions wage increases mean nothing because there is nothing more to buy. The only result is in the price of things which are being bought.

"While the mechanical bottlenecks, trained workers, equipment, and raw materials can largely be taken care of by mechanical means, even in them the elements of public opinion play an important part. These intangible elements are the essential thing. Until our apathy is gone, until we find something more inspiring than fear of the aggressor, until we see for our nation a mission which we are capable of carrying through to a successful and determined conclusion, until we put ourselves in that state of emotion and will in which these things rule, we will be doing less than we can, and our democratic institutions will not have justified their value in this world's crisis."

—RALPH E. FLANDERS,
Director of Machine Tool Priorities,
Office of Production Management.

Wire and Wireless Communication

STOCKHOLDERS of the American Telephone and Telegraph Company were warned on April 16th by Walter S. Gifford, president, not to consider the Bell system's first-quarter earnings as indicative of the rate of earnings for the entire current year. In the three months ended February 28th the Bell system had a consolidated net income of $63,165,413, equal to $3.38 a share on outstanding capital stock.

While estimating that the Bell system would add approximately 1,500,000 new telephones to its lines this year, Mr. Gifford cited spiraling costs as having an important bearing on the full year's results for the system. The Bell system already serves more than 17,800,000 stations—the largest single utility enterprise in the world.

"Costs are increasing, wages have recently been increased pretty generally, plant margins are being used up and will have to be restored, and taxes are almost certain to be increased substantially," Mr. Gifford told more than 400 shareholders of the company gathered for its annual meeting in New York city.

Mr. Gifford disclosed that the Bell system was taking every precaution to meet and even to anticipate defense requirements. To illustrate the speed and efficiency of the system, he cited a recently completed installation of new central office station in Cataumet, Massachusetts, to serve Camp Edwards, which has a quota of about 25,000 men. Work on the new station began on October 4th and by January 4th was completed.

NEW or enlarged Army and Navy camps, bases, aviation fields, and other military establishments, with government-owned or -financed plants making ordnance, aircraft, and other war products where major telephone construction is involved, total about 600, Mr. Gifford continued. "We have finished substantial telephone installations at about 200 of these places," he said, "and the facilities at the remaining places will be ready when needed."

Discussing the availability of materials required in telephone plant and construction, the executive disclosed that engineers throughout the system had been working to find substitutes for such important items as aluminum, nickel, zinc, and magnesium. He said:

> We have pledged to the priorities division of the Office of Production Management that we will make every effort to reduce our use of such materials even at some penalty in cost and effectiveness. It is not a simple matter, but we have already made some real progress and we hope to go further.

Forecasting a large increase in telephone installations in 1941, Mr. Gifford said:

> We have never yet had a net gain of as much as a million telephones in a year—last year's gain of 950,000 was the highest we ever had. But if the present rate of growth should continue throughout the year, we would gain nearly a million and a half telephones—50 per cent more than ever before in one year. In any case, an increase of well over a million looks certain.

Long-distance calls, he added, were

running 25 per cent ahead of a year ago, and some days the increase has been 35 per cent. Actually, Mr. Gifford continued, the system is handling on the average more long-distance calls than at the unprecedented peak of traffic in September, 1939, when war broke out in Europe.

Expenditures of the system for new construction in 1941 will approximate $400,000,000, an increase of $110,000,000 over the 1940 expansion budget. In this connection, Mr. Gifford intimated that further financing would be undertaken before the end of the year. While he did not disclose the method of financing to be used, it was believed that a large convertible debenture issue was under consideration. Last November AT&T raised $140,000,000 of new money through sale of 30-year 2¾ per cent debentures to a group of insurance companies.

TAKING issue with the Federal Communications Commission over its recent action instituting a formal rate case against Bell system long-distance rates, Mr. Gifford said he was "disappointed that the commission should see fit, especially at this critical time, to depart from the practice which it has followed in the past of handling rate matters by informal conference with the company." This procedure, he asserted, "which the commission has noted in its annual reports and other public statements, has been productive of results without the necessity of legal proceedings."

There were 10,833,772 voting shares represented at the meeting, by proxy and in person, and all retiring directors were reëlected for the ensuing year.

* * * *

THE introduction in a number of Connecticut municipal areas of a new plan allowing telephone subscribers to make an unlimited number of calls to adjacent specified exchanges for an increased, flat monthly rate was recently being considered by the Southern New England Telephone Company.

Joseph W. Alsop, chairman of the state public utilities commission, announced on April 16th that extended area service, as the plan is known, would be put into operation for the first time in Connecticut this month when Stamford, Greenwich, New Canaan, and Darien would be linked by such a service.

The service will be optional to subscribers and will eliminate toll charges for individual calls within the specified area for those who avail themselves of it. The present monthly rate for service within a single exchange will be increased somewhat to subscribers who elect to take the new service.

* * * *

THE Michigan Bell Telephone Company, which last month was ordered by the state supreme court to reduce its rates on intrastate long-distance calls by about $500,000 a year, faced the prospect of further rate reduction orders, members of the state public service commission indicated recently. Commission members asked officials and attorneys of the company to confer with them at Lansing.

John J. O'Hara, commission chairman, said:

> According to the company's last annual report, it is making more money, even considering the reduction in intrastate long-distance rates, than we believe it is entitled to. We are holding this informal conference to determine whether there are factors that make their actual earnings less than they appear to be. If, after the conference, we are still of the same opinion, the commission may file an order for a rate hearing.

Commissioner Ivan E. Hull, who asked the commission to investigate phone rates, said his computations showed the company was earning "considerably more than the 5½ or 6 per cent a year that it is entitled to." He further stated:

> The 1940 statement indicates a much higher earning on its book value and even more on its 1936 base adding the net additions to plant. We want to discuss with the officials where reductions might be applied and see if we can reach an agreement without a long court fight.

According to figures compiled by the

Detroit Board of Commerce, the number of telephones in the Detroit zone alone reached a new high of 410,479 during 1940. This compared with only 238,818 in 1933 and 351,597 in 1929, the previous high point prior to 1939.

Whether the unclaimed portion of the $1,500,000 refund the Michigan Bell Telephone Company has been directed to return to its customers by the supreme court decision that its intrastate long-distance rates have been too high, will escheat to the state or be kept by the company, had not been determined, James W. Williams, assistant attorney general, said on April 16th. Williams said there were several legal questions involved and "we haven't settled them yet." He stated in part as follows:

> No one knows yet how much will be unclaimed, but it probably will be a considerable sum, considering the number of people who made calls from pay stations of which they kept no record, and the number of persons who changed addresses or died.

* * * *

WHEN the sleek new planes of the Thirty-second Division Observation Squadron take to the air it is often for brushing up in one of its communication methods. The training is called "panel exercises." Ground troops lay out strips of white cloth to form code combinations and airmen answer by tossing written messages overboard.

"We use radio whenever we can," Lieutenant Colonel Floyd E. Evans, division air officer, explained. "It's more direct, quicker, less liable to error, much more satisfactory—when there isn't any enemy. But if the enemy were near by he could listen as well as we could. And if we used a code on the radio that baffled him, he could tune his transmitter to the same frequency and jam out our messages. So we go back to the panels."

* * * *

APPOINTMENT of W. H. Harrison, vice president and chief engineer of the American Telephone and Telegraph Company, as liaison between the Office of Production Management and the Navy Department and Maritime Commission was revealed by defense officials recently.

In a letter to Secretary of the Navy Knox, John D. Biggers, OPM official in charge of production, said that Harry Hopkins had requested the OPM to appoint a liaison official to handle the naval and merchant marine operations of the lend-lease program.

Mr. Harrison's appointment was accepted by Secretary Knox, Navy officials afterwards reported.

* * * *

BECAUSE proposed changes in the Postal Telegraph-Cable Company method of computing rates for messages sent abroad may result in an increase in rates between certain points, the Federal Communications Commission on April 15th, upon its own motion, ordered inquiry into the situation, meanwhile suspending the effective date of the contemplated tariffs from April 18th to June 18th.

For rate-making purposes, the continental United States is divided into five zones. The rates applicable to a message from a particular point in the United States to a foreign country depends upon the zone in which the sender is located. There is provision for a customer paying the telephone charge for getting his message to the nearest telegraph office.

The Postal Telegraph Company now proposes certain changes which, in effect, would increase the charges for messages from certain points. For example:

The zone rate for a telegraph message from New York city to London, England, is 20 cents a word. The zone rate for messages from points in Long Island to London, England, is 24 cents a word. Under the present tariffs, if a message from a non-Postal point in Long Island destined to London is telephoned to New York city, the zone rate applicable thereto is 20 cents a word and the customer may get an allowance for a portion of the telephone charges actually paid by him for getting his message to the Postal office in New York city. Under the proposed tariffs, however, not only will the customer have to pay all the telephone charges for getting his message to the Postal office in

New York city, but he will have to pay the higher zone rate of 24 cents a word.

There is also a question with respect to the responsibility of the company in the handling of messages telephoned from a point not served by a Postal office.

* * * *

THE Senate Interstate Commerce Committee, under the chairmanship of Senator Wheeler of Montana, was scheduled to begin hearings May 5th on its investigation into proposed merger of the two national wire systems, Western Union and Postal Telegraph. It was not expected that the investigation would produce very much in the way of results in the form of legislation at the current session. Rather, it was felt, Senator Wheeler simply wanted to dispose of the matter which has been hanging fire in his committee for nearly two years.

Opposition or at least complications are expected to come from the demands of labor unions that have always insisted that any merger plan would have to make some provision for avoiding the laying off of duplicate employees. Also, the National Federation of Telephone Workers objects to the recommendation of the FCC that teletype operations should be transferred from the telephone industry to the telegraph industry as part of any consolidation program.

Organization of an industry-wide union by 3,300 employees of Western Union Telegraph Company in eight southwestern states neared completion when T. C. Durnal, union chairman, and Paul C. Holmes, both of Dallas, Texas, returned from Washington with a charter personally approved by President Green for the Telegraph Workers Union of the American Federation of Labor.

Ratification of the action of these two heads of the union's board of directors for the Dallas area was begun immediately. Petitions were started whereby each large city and smaller district office soon would ask certification by the National Labor Relations Board as exclusive bargaining agent for all the Western Union employees of that office.

Demands were being drafted, Durnal said, for early presentation to Western Union's management for a contract to cover all its employees. Involved are the states of Arkansas, Colorado, Kansas, Louisiana, Missouri, New Mexico, Oklahoma, and Texas. These are the components of the company's gulf division. In this division, Durnal estimated, there are 6,000 employees, with 800 in Dallas county.

THE company has five other geographical divisions, Durnal said, with a national employee list numbering 50,000. Similar organizational work by the union was said to be proceeding in those other divisions.

Corresponding to the types of work they do, such as clerks, shopmen, linemen, telegraphers, and accountants, the organization is made up of local unions. There are five in Dallas and thirteen in other parts of that region. Durnal, clerk in the Dallas general manager's office, is president of one of these locals, and Holmes, member of the Dallas accounting office, is president of another. Their positions as chairman and secretary-treasurer, respectively, give them jurisdiction over the union's work throughout the gulf division.

A concentrated campaign for membership, both in Dallas county and throughout the eight states, would begin immediately, Durnal revealed. "We already have 500 of the 800 employees in this county as members," he claimed. "So far as I can find out this is the first industrial, or vertical-type union to be organized under the jurisdiction of the American Federation of Labor in the whole Southwest."

Until recent years, the AFL stuck exclusively to the craft style of union organization, taking in as members only machinists, carpenters, and the like. That has been the principal distinction between it and the Congress of Industrial Organizations (CIO), which, from its very beginning, concentrated on organizing by the whole industry and disregarded any occupational distinctions between any of its workers.

Financial News and Comment

By OWEN ELY

Peoples Gas Light & Coke Company

PEOPLES Gas, one of the "big three" Illinois operating companies in the old Insull empire, has total assets of about $190,000,000 and annual gas sales (in Chicago and the metropolitan area) of about $41,000,000. The company was incorporated in 1855 under a special legislative act granting it a perpetual but non-exclusive franchise. During the nineties a number of local gas companies were merged, and other properties were acquired from time to time.

In 1930 the company acquired through a subsidiary an interest in Natural Gas Pipe Line Company, and in the following year natural gas was introduced in Chicago for mixture with manufactured gas (which now amounts to only about 15 per cent of the total). This has resulted in a huge increase in output as measured in therms, from 235,000,000 in 1931 to 765,000,000 in 1940. Owing to lower rates, however, revenues increased only about 15 per cent in the decade ended 1940. Sales in dollars and in therms were as follows for 1939 (revenues include an amount subsequently refunded under a rate decision):

	Dollars	*Therms*
Residential	57%	15%
Space heating	7	5
Commercial	10	4
Industrial	7	5
Other utilities	8	37
Miscellaneous	11	34
	100%	100%

Peoples Gas was involved in rate litigation during 1936-40; the United States Supreme Court on April 1, 1940, dismissed the company's appeal from a local court decision cancelling a $3,000,000 increase in gas rates. The request for higher rates had originally followed the imposition of a 3 per cent state tax on gross receipts. Some $6,000,000 of impounded funds was refunded to consumers last year, and rates reverted to the schedule in effect prior to February, 1938.

In September, 1938, the Illinois Commerce Commission petitioned the FPC to reduce rates of Natural Gas Pipe Line Company of America for gas sold to a subsidiary of Peoples Gas. The FPC later ordered a $3,750,000 rate reduction by the Pipe Line Company, but this has just been upset by the United States Circuit Court of Appeals. (For further details, see p. 633, this issue.) While Peoples Gas, in association with a number of other companies, is indirectly interested in the natural gas leases in the Panhandle (Texas) field and in the transportation of the gas to Chicago, it nevertheless would have benefited by the proposed rate reduction of the Pipe Line Company. Thus Peoples Gas has been adversely affected by these two major court decisions. (It is possible, of course, that the Pipe Line Case may be appealed to the Supreme Court by the FPC or others.)

THE company's production facilities include five gas manufacturing plants with a daily capacity of 737,000 therms (the Crawford station producing about 90 per cent of the company's total output). A considerable volume of by-product coke-oven gas is acquired from industrial concerns. The natural gas from Texas is purchased under a contract which runs to 1946; reserves are be-

lieved adequate up to that year; and when the supply is materially exhausted, or the company discontinues its purchases, the service will be restored to a straight manufactured gas basis.

The supply of natural gas has exceeded requirements in the Chicago area by a considerable margin. Apparently the management, in writing its purchase contract years ago, overestimated the growth possibilities; and, in order to use the minimum quotas contracted for, it has had to "dump" a considerable amount of gas at very low rates. As indicated above, some 29 per cent of the therms produced in 1939 were sold to residential and industrial consumers, although such sales produced 81 per cent of the revenues, while 71 per cent of the therms yielded only 19 per cent of the revenues.

Peoples Gas has a comparatively simple capitalization—$69,554,000 funded debt and $65,600,000 common stock (par $100). Funded debt consists of six issues with interest rates of 4 to 6 per cent. Unfortunately, nearly half of the funded debt is noncallable. The $37,000,000 refunding 4s (issued in 1931 and 1936), rated "A" by Fitch and "BAA" by Moody, apparently cannot be refunded under present market conditions and the peak prices for the two issues are about in line with their call prices. The company has not, therefore, been able to take as much advantage of refunding opportunities as the average electric utility.

Share earnings, dividend payments, and price ranges on the common stock for 1929-40 are indicated below:

Year	Earned	Dividends	Price Range High	Price Range Low
1940	$4.63*	$3.00	43	23
1939	4.13	2.00	45	31
1938	2.48	2.00	42	22
1937	3.65	2.00	66	22
1936	3.21	...	58	38
1935	1.61	...	44	18
1934	3.12	...	44	19
1933	4.08	3.50	78	25
1932	6.27	6.50	121	39
1931	10.07	8.00	250	107
1930	10.17	8.00	325	185
1929	9.57	8.00	404	208

*After allowing for nonrecurring expense items amounting to 77 cents per share.

The share earnings figures of Peoples Gas during the past decade have been subjected to considerable adjustment owing to retroactive rate cases, tax decisions, etc.; hence, the above figures may vary from those appearing in some of the financial services.

The stock is currently selling around 40 to yield about 7½ per cent.

Debt Payments versus Preferred Arrears

JOSEPH L. Weiner, director of the SEC utilities division, has sought comment and suggestions from the utility industry regarding a proposed new rule which, with a few exceptions, would forbid payments of interest or principal on debts to holding companies by subsidiaries which have preferred stocks with dividend arrears held by the public.

It will be recalled that the same procedure was followed with the competitive bidding program, and that in finally promulgating the rule the SEC apparently ignored the many criticisms leveled against that policy. It seems possible, therefore, that the present move is merely in the nature of a courtesy or advance warning to the utilities, rather than an effort to obtain further light on the subject.

Mr. Weiner, in holding that publicly held preferred stock should have priority over a debt claim of the parent holding company, stressed the "Deep Rock" decision by the United States Supreme Court, Taylor *v.* Standard Gas & Electric Co. 306 US 307. However, it is not altogether clear why this case should form a broad precedent for the utility industry. In the first place Deep Rock Oil was not a utility; secondly, the company had been in receivership since 1933, and the relationship with Standard Gas & Electric thus differed widely from the normal relations between a utility operating company and the parent holding company which has supervised its finances and operations. If the parent company advances funds to the operating company for additions and betterments or

other needs, it would seem entitled to the same protection as a bank or any other unsecured creditor, especially if there is no hint of fraud or mismanagement. Obviously, each individual case should be studied on its own merits and no drastic, uniform rule should be applied to all holding companies without most careful consideration.

If the SEC proceeds with its proposal the effects will largely be concentrated on a few companies. It is possible, therefore, that the proposal is in the nature of a "prod" to the holding companies which have been slow to respond to SEC hints that preferred arrears should be adjusted.

ONE of the principal companies to be affected would be Electric Bond and Share. The company holds $39,000,000 notes of American & Foreign Power, which has substantial arrears on its preferred stocks. It also owns $27,925,000 notes of United Gas Corporation, in addition to $25,000,000 debentures of a subsidiary; and United Gas has about $22 first preferred arrears. If interest income from United Gas and American & Foreign Power is cut off from Electric Bond, its own preferred might be adversely affected, although the company has such a strong cash position (over $23,000,000 net current assets, principally in cash and government bonds) that preferred dividends could be paid indefinitely. On the other hand, the rule might prove favorable for holders of American & Foreign Power and United Gas preferred issues, in that recapitalization programs might be expedited.

Electric Power & Light subsidiaries in 1939 had over $21,000,000 preferred arrears (about half United Gas, and half other companies). But total interest received from subsidiaries in 1938 amounted to only $119,042 compared with dividends of $2,096,979; hence, the company should apparently be little affected by the proposed rule.

American Power & Light in 1939 received about 12 per cent of its total income from interest payments by Florida Power & Light, whose preferred stock has arrears of about $35. Loss of the interest income would not affect the bonds, but might slightly reduce the current partial payments on American Power & Light preferred issues.

Engineers Public Service's subsidiary, Puget Sound Power & Light, has substantial arrears (Engineers has been trying to rid itself of this subsidiary), but as interest received from subsidiaries in 1939 was nominal, the parent company should be unaffected.

United Light and Power in 1939 received about 12 per cent of its income from interest, but if all of this were omitted it should not affect payments on the company's own bonds.

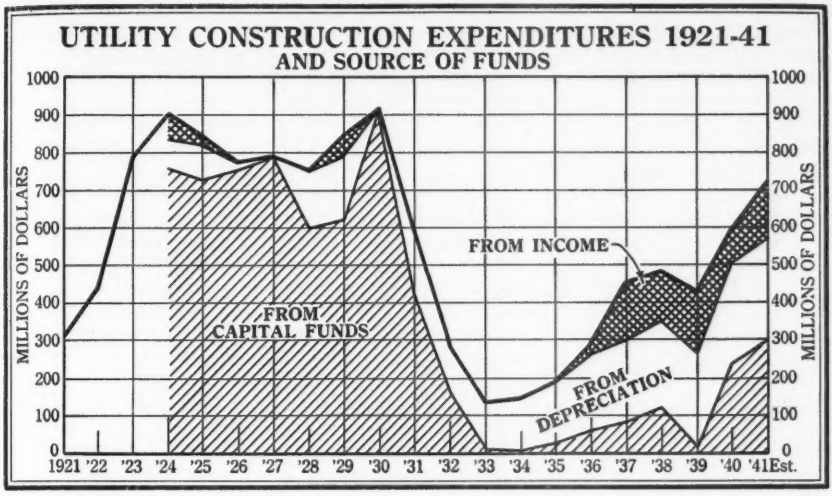
A review of other leading holding companies does not seem to reveal any that would be seriously affected if the new rule should become effective.

Plant Growth of the Utilities and How It Was Paid For

THE accompanying chart shows the private electric light and power industry's construction budgets of the past two decades, and an estimate for 1941.

It is difficult, because complete figures are lacking (census figures being available only every five years), to estimate exactly how the money has been provided for these construction expenditures. The figures in the accompanying chart must be considered highly approximate—to some extent guesswork. Perhaps more accurate figures could be obtained by compiling statistics for individual systems. In any event, the figures are intended merely to illustrate the general trend in utility finance and accounting.

In recent years the utilities have apparently found it necessary to dip into income or surplus to eke out their construction funds, and unless new capital financing is "stepped up" in 1941 this will continue. However, some systems may use the proceeds from the sale of some of their investments to supplement funds obtained from new capital issues. UGI,



for example, may use the funds obtained from sale of Connecticut Light & Power stock to finance the construction budget of Philadelphia Electric.

Integration Program Speeded Up

APPARENTLY not deterred by threats of court appeals by Engineers Public Service and Commonwealth & Southern, the SEC is now moving rapidly to enforce its interpretation of the "death sentence" against leading holding companies. The commission has now made it very clear, in its final ruling against UGI, that each holding company must confine its interests to a single contiguous area, and that gas and electric properties may not be combined in a "single" integrated system. However, the commission has not yet closed the door to retention of "investments" in other utilities (in excess of 10 per cent).

UGI was given a year to carry out its program, but there was an indication that an additional year might be granted. The company's coöperative gesture in disposing promptly of its 701,253 shares of Connecticut Light & Power apparently did not move the commission to take a more lenient attitude, the formal UGI order appearing about a week after the successful stock offering. The stock of the Connecticut Company, one of the largest and oldest operating companies in New England, found a ready market in that area, despite rather generous pricing as contrasted with other leading issues.

The success of this offering augurs well for the placing of other operating company stocks directly with the investing public. It now seems likely that sale to the public, rather than "swapping" of companies among the different utility groups, will be the integration policy generally followed by the holding companies. Sale of properties for cash, instead of in trade for others, will also help to solve the problem of financing an expanded construction budget (discussed elsewhere). Thus, UGI may, it is reported, use funds from the Connecticut sale to help finance Philadelphia Electric's $50,000,000 construction program and to clear up that company's $15,000,000 bank loans. The Philadelphia Company's proposed financing of about a year ago was held up by the SEC, owing to a question regarding adequacy of depreciation charges.

President Woolfolk, in releasing the

annual report of United Light and Power, reiterated that company's policy of complete coöperation with the SEC on integration. He pointed out that system properties are well located and well managed, protected by ample reserves, and with no dividend arrears except for the top holding company itself.

An important step by United Light and Power toward integration is the proposed sale of 710,500 shares of Northern Natural Gas Company, registration on which was filed April 21st. The offering includes both the 35 per cent interest owned by United Light & Railways and a similar block held by North American Light & Power (the remaining 30 per cent is held by Lone Star Gas). The offering will probably be made by a group headed by Blyth & Company, the deal being rushed through in time to avoid competitive bidding.

National Power & Light, liquidation of which has been reported under consideration by EBS management, has been delayed by action of the city council of Houston in cutting the rates of Houston Lighting & Power, an important property. (See p. 631.)

National Power & Light has about $20,000,000 cash which, together with proceeds of property sales, could be used to retire $17,734,000 bonds and $27,917,600 preferred stock.

Commonwealth's plan for recapitalization, following completion of refinancing of its southern group (already well under way), now seems likely to be delayed pending further study of the drastic SEC integration order. Commonweath officials, while they have made little direct comment on the SEC contention that the company's common stock has practically no value, are reported to have employed a prominent engineer to evaluate system properties and determine available equities for the common stock.

North American Company, against which a final integration order has also been issued, is said to be considering disposing of its holdings of Wisconsin Electric Power preferred. The system has been given a choice of retaining any one of the following systems: Washington Railway & Electric, Cleveland Electric Illuminating, Union Electric of Missouri, and Wisconsin-Michigan properties. The interest in North American Light & Power must be disposed of. According to press reports Union Electric may be favored for retention.

United Corporation, which did not get very far with its diversification program announced a year or so ago, is now trying to "sterilize" its holdings of other utilities where these are in excess of the 10 per cent statutory limit; at the recent stockholders' meeting of Niagara Hudson, United refrained from voting on the election of directors.

Consolidated Electric & Gas, whose properties are spread over eighteen states and six foreign countries, is preparing an evaluation of system assets as preliminary to a broad recapitalization plan. Because of the difficulty in obtaining fair prices for subsidiaries, however, no definite move has yet been made to comply with the geographical integration requirements.

Public Service of Indiana Plan Approved

The SEC has approved (with several reservations) the merger-recapitalization plan for Public Service of Indiana and its affiliated companies. The new company will have revenues of about $21,000,000 and will be capitalized at about $108,000,000.

It is anticipated that voting by security holders and other details can be cleared up by July, and trading in the new preferred and common stocks has already started on a "when issued" basis. The new $5 preferred is quoted around 86 to yield about 5.82 per cent; according to the *pro forma* income statement for 1940, the dividend was covered about 3.8 times, and on an over-all basis 1.5 times.

The new common stock, which earned about $1.88 in 1940, is currently quoted about 9¼ and has a "stated" value of 25 in the new balance sheet.

INTERIM EARNINGS PER SHARE

Electric and Gas Companies	*End of Period*	*12-month Period* 1940	1939	Incr.	*3-month Period* 1940	1939	Incr.
American Gas & Elec. *Consol.*	Feb.	$3.02	$2.61	15%	..	..	..
Amer. Power & Lt. (Pfd.) *Consol.*	Nov.	6.71	5.77	17	..	..	..
American Water Works *Consol.*	Sept.	1.30	.62	110	.12	.26	D54%
Parent Co.	Sept.	.45	.38	18	.08	.12	D33
Boston Edison	Dec.	2.39	2.21	8	..	..	..
Cities Service P. & L. (Pfd.) *Consol.*	Dec.	33.19	35.93	D7	..	..	..
Parent Co.	Dec.	27.41	19.90	38	..	..	..
Commonwealth Edison *Consol.*	Sept.	2.30	2.36	D3	.42	.55	D24
Com. & Southern (Pfd.) *Consol.*	Feb.	9.07	9.11	..	..	..	..
Consolidated Edison, N. Y. *Consol.*	Dec.	2.23	2.22	..	.57	.55	4
Parent Co.	Dec.	2.08	2.18	D5	.50	.56	D11
Cons. Gas of Baltimore *Consol.*	Feb.	4.27	4.99	D15	..	..	..
Detroit Edison *Consol.*	Mar.	8.68	7.93	9	..	..	..
Elec. Bond & Share (Pfd.) *Parent Co.*	Dec.	6.86	6.67	3	..	..	..
Elec. Power & Lt. (1st Pfd.) *Consol.*	Nov.	8.42	5.63	50	.84	1.33	D37
Parent Co.	Nov.	1.75	.71	147	.41	.31	32
Engineers Public Service *Consol.*	Feb.	1.63	1.64	..	..	..	..
Parent Co.	Feb.	.56	.61	D8	..	..	..
Federal Light & Traction *Consol.*	Dec.	2.02	2.64	D23	..	..	..
Inter. Hydro-Elec. (Pfd.) *Consol.*	Sept.	1.66	10.66	D84	..	..	..
Long Island Lighting (Pfd.) *Consol.*	Dec.	5.23	5.60	D7	..	..	..
Parent Co.	Dec.	6.19	5.61	10	..	..	..
Middle West Corp. *Parent Co.*	Sept. (a)	.35	.25	40	.15	.08	87
National Power & Light *Consol.*	Nov.	1.39	1.07	30	..	..	..
Parent Co.	Nov.	.66	.67	D2	..	..	..
Niagara Hudson Power *Consol.*	Dec.	.66	.51	29	..	..	..
North American Co. *Consol.*	Dec.	1.92	1.99	D4	..	..	..
Parent Co.	Dec.	1.52	1.60	D5	..	..	..
Nor. States Pwr. (Del.) *Consol.* (Cl. A)	Dec.	2.70	2.07	30	..	..	..
Pacific Gas & Electric *Consol.*	Dec.	2.68	2.84	D6	..	..	..
Public Service Corp. of N. J. *Consol.*	Feb.	2.46	2.88	D15	..	..	..
Parent Co.	Dec.	2.44	2.60	D6	..	..	..
Southern California Edison *Parent Co.*	Dec.	2.27	2.36	D4	..	..	..
Stand. Gas & Elec. (Pr. Pfd.) *Consol.*	Dec.	9.79	6.94	40	..	..	..
Parent Co.	Dec.	2.11	1.76	20	..	..	..
United Gas Improvement *Parent Co.*	Dec.	.97	.98	D1	..	..	..
United Lt. & Power (Pfd.) *Consol.*	Dec.	8.78	7.66	13	..	..	..
Parent Co.	Dec.	3.94	3.90	1	..	..	..
Gas Companies							
American Light & Traction *Consol.*	Nov.	1.84	1.49	24	..	..	..
Brooklyn Union Gas	Dec.	2.42	2.42	..	..	..	..
Columbia Gas & Electric *Consol.*	Dec.	.52	.46	13	..	..	..
Parent Co.	Dec.	.38	.34	12	..	..	..
El Paso Natural Gas *Consol.*	Jan.	3.73	3.75	D1	..	..	..
Lone Star Gas *Consol.*	Dec.	1.17	.98	19	..	..	..
Oklahoma Natural Gas *Consol.*	Feb.	3.34	2.94	3	..	..	..
Pacific Lighting *Consol.*	Dec.	3.13	3.60	D13	..	..	..
Peoples Gas Light & Coke *Consol.*	Dec.	4.63	4.13	12	1.23	1.96	D37
United Gas Corp. (1st Pfd.) *Consol.*	Nov.	12.75	10.52	21	..	..	..
Parent Co.	Nov.	10.02	6.85	46	..	..	..
Telephone and Telegraph Companies							
American Tel. & Tel. *Consol.*	Feb.	11.55	10.61	8	..	..	..
Parent Co.	Mar.	10.20	9.58	6	..	..	..
General Telephone *Consol.*	Dec.	2.35	2.12	10	..	..	..
Western Union Tel.	Dec.	3.46	1.32	162	1.34	.70	92
Systems outside United States							
Amer. & For. Pwr. (1st Pfd.) *Consol.*	Sept.	5.53	5.22	6	..	..	..
Parent Co.	Sept.	3.10	1.73	79	..	..	..
Inter. Tel. & Tel. *Consol.*	Dec. (a)	D.03	.45	..	..	..	..
Parent Co.	Dec.	D.29	.24	..	..	..	..

D—Deficit or decrease.
(a) Earnings are exclusive of certain subsidiaries.

What Others Think

Opposition to St. Lawrence Project Is Still Substantial

ALTHOUGH most Washington observers seem to think that the latest proposal by President Roosevelt to win approval for a project which he has long cherished—the St. Lawrence seaway and power proposal—will be successful, the amount of opposition that has developed since the President revived the issue continues to impress. In 1934, the St. Lawrence proposal, presented then in treaty form, won the Senate's majority approval, 46 to 42, but failed to win the necessary two-thirds majority required for treaty ratification.

It is principally on the basis of this background that the latest St. Lawrence proposal is conceded a much better than even chance of passage—because in its new form, officially an agreement rather than a treaty, only majority approval will be required.

Most political experts figure that the sentiment for and against the proposal is about the same as it was in 1934, with any possible advantage going to the proponents of the plan by reason of the protective coloration of national defense with which the latest proposal is now cloaked. But the opponents of the plan are just as spirited in their opposition as if they had every reason to be optimistic about its defeat.

They deny the alleged "defense" feature of the plan as a fake and a disguise. They point out that the alleged benefits of navigation and power generation would not become actually available for four years or more, after which time the present international emergency will have been resolved for better or worse. They deplore the diversion of great armies of skilled workmen, great quantities of strategic metals, costly supplies, and financial appropriations for such a task. At this time the defense effort of the nation could make better use of these sinews in ways actually and obviously connected with national defense, they say.

THE administration leaders in Congress are reported to be somewhat disturbed over the vigor of this opposition but they remain confident on the whole. Most of the controversy seems to be waged over the navigation features, with arguments on the power aspects thrown in for good measure. In other words, sectional interests in important seaboard cities are still jealous of the welfare of their respective commercial ports. Contrariwise, the agricultural states of the North Central and Northwest, visualizing hopeful possibilities of water-borne traffic through a connection between the Great Lakes and the Atlantic, are the main supporters of the new plan, just as they were of the one defeated in 1934.

Of the forty-six Senators who voted against the St. Lawrence project in 1934, seventeen are still in office while twenty-three of the forty-two who supported the waterway are still serving. A question of primary interest is whether any of the Senators who voted against the 1934 proposal have changed their minds. This question assumes special importance in view of the fact that Senator George of Georgia, chairman of the Foreign Relations Committee which would handle the proposed agreement with Canada, and Senator Bailey of North Carolina, chairman of the Commerce Committee which would probably handle any request for funds to carry out the project, both voted against the St. Lawrence treaty in 1934.

"It is not very wholesome," said Senator McCarran (Democrat) of Nevada,

"to see this proposal which was beaten once in the Senate now revived as a defense project."

THE press on the whole seems quite critical of the new St. Lawrence plan which may be explained in part by the fact that the daily press has its main stronghold in the great salt water port cities. Even papers in West coast cities such as the *San Francisco* (California) *Chronicle* and the *Los Angeles* (California) *Times* have editorially opposed the seaway. The *Columbia* (South Carolina) *Record* (perhaps after some reflection on the declining fortunes during recent years of its neighboring port city of Charleston) stated:

> The scheme is advanced as a defense project and it may not be disputed that it would serve the long-time defense needs of the United States. It would make available the shipbuilding resources of the Great Lakes for replacement of ocean shipping lost in war. It would add to the developed water power of both the United States and Canada.
>
> But it is of no immediate value in defense and may even constitute a handicap to immediate defense needs. For it will require four or five years for its completion, when defense needs are immediate needs. It will even divert money and men and materials to a long-range project from more pressing defense industries and activities.
>
> It is simply a matter of priorities.

Even further down in the traditionally Democratic territory of the solid South we have such journals as the New Orleans *Times-Picayune*, a stout supporter of the New Deal, editorially condemning the "St. Lawrence scheme" in part as follows:

> With Congress voting seven billions for aid of the fighting democracies in addition to the many other billions for national defense preparation and equipment, this would seem to us the worst of all possible times to launch a project rejected on its own demerits in 1934, requiring years to complete and involving a cost, by the previous estimates, exceeding a half-billion dollars. Surely that, or any other 9-figure sum can be and therefore should be expended in this national crisis far more wisely and helpfully than in the slow development of an enterprise that cannot serve immediate national needs—one that has been widely regarded through two administrations as a Roosevelt "hobby."

Evidence that the *Times-Picayune* is not alone in opposition to the St. Lawrence scheme in Louisiana was seen in the letter made public at Baton Rouge on March 31st, wherein Governor Sam Jones warned President Roosevelt that the development would cause "irreparable harm to the ports and shipping of the South." Jones protested "the subsidization by American taxpayers of Russian and Japanese tramps through the development of a waterway lying almost wholly in alien soil." Business men in New Orleans have organized to fight the plan.

OTHER Democratic newspapers which have registered editorial opposition include the *Daily Oklahoman*, the *Miami* (Florida) *Herald*, and the *St. Louis Post-Dispatch*. The latter questioned the constitutionality of the new approach in part as follows:

> The conclusion is inescapable that the administration does not want to run the risk of having the project fall short of the two-thirds majority—in March, 1934, it lost by 12 votes in Congress' first rebuff to Mr. Roosevelt—and so has decked it out in new colors. Whatever the precedents are for a switch of this kind, the fact remains that the administration is playing free and easy with the constitutional regulations of our foreign affairs.

Probably the most hard-hitting editorial opposition of all has come from the conservative, independent *New York Times*, which has consistently and carefully needled every argument that has been brought forward from time to time in favor of the project. Baltimore's great independent Democratic journal, *The Sun*, has also been vigorously swatting all contentions in favor of the plan, one after the other.

The preponderance of editorial opinion in New England, doubtless reflecting fears of that maritime section that the seaway would open up economic competition on the Great Lakes, is opposed to the treaty. The New England Shippers Advisory Board has organized in an effort to block passage of the measure.

Other organized opposition comes from coal operators and shippers in

general. While private electric utilities are naturally opposed to any expansion of the New Deal's power program, this opposition does not seem to be very well organized and even if it were it would probably be of little political importance.

One unexpected "break" for the opposition, however, came with the proposal by Representative Mansfield of Texas to do away with locks in the Panama canal as a defense measure. The question immediately arose that if the water gates at Panama are vulnerable, then the St. Lawrence locks would likewise be vulnerable. Writing on this angle in *The Washington Daily News*, John W. Love, a Scripps-Howard reporter, stated:

> If the water gates at Panama are vulnerable, the objectors will ask, what about the St. Lawrence locks?
>
> The Panama canal's length is 40 miles and it contains two sets of locks. The rebuilt St. Lawrence system will have "only 67 miles of canals," in the words of A. R. Danielan, director of the St. Lawrence Survey, and will have 17 locks. It will also be closer to the Nazis, and the President has been reminding us of the range of modern aircraft. . . .
>
> If any substantial number of Congressmen believe it worth $1,000,000,000 to do away with the locks at Panama, they will be asked what they think about sinking $266,000,000 into locks and power stations in the St. Lawrence, the closing of which would bottle up in the Great Lakes the ships to be built there and cut off the power the new hydro stations would be supplying to defense industries in northern New York.
>
> Mr. Mansfield's argument is the biggest windfall the opposition to the St. Lawrence sluice has had since the War Department decided New York state was not a "safe area" for building new munitions plants.
>
> The department, with the Defense Advisory Commission accepting its view, drew a line from Detroit to Cleveland and down past Pittsburgh. West of this line was the area in which the general staff thought it safe to build new arsenals. The St. Lawrence undertaking would be several hundred miles northeast of this line. . . .
>
> One line of argument will run like this: Statements have been made that the canal would make it possible to build cruisers and destroyers on the Great Lakes, but what would happen if lucky bomb hits bottled up a year's crop of them?
>
> The opposition this time consists of two groups, those who would have none of it the other times it has been considered, and those who think it has merits but not in the direction of defense.
>
> Among the latter are those who ask why, if ocean ships are needed so badly, they are not built on the lakes in halves, taken through the existing St. Lawrence canals on their sides (it has been done), and put together at Montreal. Inquirers at the Maritime Commission are told it would make necessary too much figuring of strains.
>
> If, these opponents add, President Roosevelt has his eye on existing Great Lakes ships for ocean service, such ships as are needed could be cut in half next summer and floated down, as one or two were in 1918.

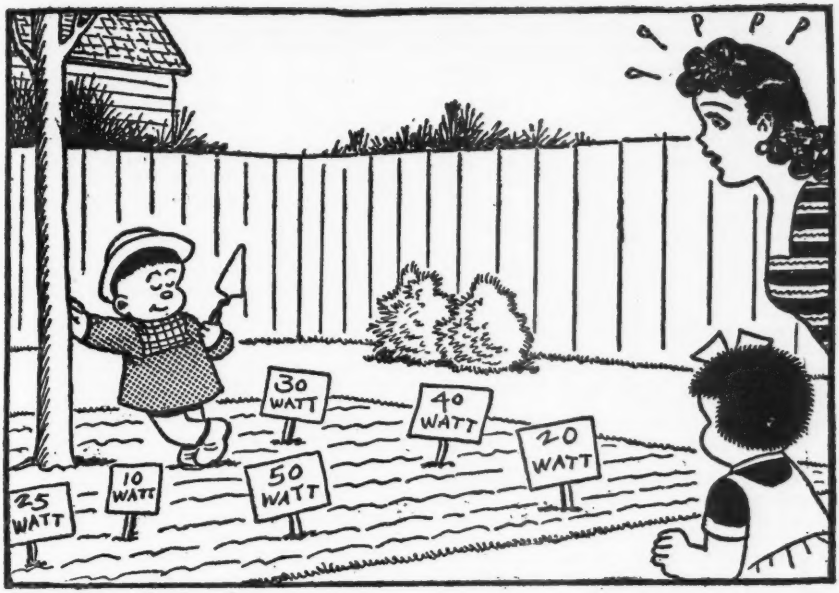
THE fight for approval of the seaway plan was launched by Adolph A. Berle, Jr., Assistant Secretary of State. In a radio broadcast from Washington over a national hook-up on March 23rd, Mr. Berle attacked the most troublesome of all arguments against the new proposal—the time element. "Everybody hopes that the war may be over before three years have passed," he said. "But since nobody can guarantee that, we must not take any chances." Mr. Berle added that, "We thoroughly believe that Great Britain will win this war, but we propose to be fully prepared for defense no matter what happens."

Berle cited the need for hydroelectric power in the upper New York state area for defense industries. But of greater importance, he said, was to open Great Lakes shipyards to enable construction. He stated:

> The Great Lakes region is far inland and cannot be attacked. It is near the great steel plants which make the girders and hulls from which the ships are built. It is in the area where the engines which drive the ships are manufactured, and where the skilled labor is available. . . .

The Great Lakes Harbor Association, led by R. F. Malia, is actively supporting the plan. Malia says it would mean "breaking of the shackles that have held back proper development of the Great Lakes empire." He predicted the construction of ship-building facilities at Milwaukee, Kewaunee, Green Bay, and Superior.

The United States Department of Commerce and the New York State Power Authority are among the other



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THEY SAID THEY WANTED THE BULBS IN THE CELLAR PLANTED

important interests lobbying for passage of the bill.

WITH respect to the press, the support for the St. Lawrence proposal seems to be just as bipartisan as the opposition. In other words, middle western and northwestern newspapers, both Democratic and Republican, join in a chorus of approval. Most active and daring blows editorially have appeared in the *Louisville* (Kentucky) *Journal,* the *Detroit* (Michigan) *News, Columbus* (Ohio) *Dispatch,* and *Chicago Daily News.* The *St. Paul Dispatch,* in commenting upon the action taken by the Minnesota house in voting 106 to 1 to memorialize Congress in favor of the St. Lawrence proposal, stated editorially:

> Industrial development of the interior states lags because of the handicap of high transportation costs. When the Panama canal was completed, Middle West industries lost former markets on the Pacific coast because eastern competitors could get there cheaper. The transcontinental railroads have struggled for years to regain lost traffic through permission to cut rates to the Pacific coast, without success. This has been just one phase of the battle of the Middle West to cut through the barrier of high transportation costs. The various waterway improvements, including the St. Lawrence project, are other phases.
>
> This section has from time to time been threatened with loss of such industry as it has, partly because of the transportation handicap. To say that cheaper transportation will weaken local industry is just turning things completely around. On the contrary, it will open national and foreign markets now closed to local industry.

The *Cleveland Plain Dealer* made a rather novel reply to the argument that the St. Lawrence seaway will not be finished in time to assist the nation's defense effort, first of all by repeating the Federal administration's contention that if it drags on into 1943 or 1944, the cause of democracy will depend more and more on navigation and generation that would be made possible by the St. Lawrence proposal, and continued with the following statement:

> If the war should end before that time in a defeat for England, our own defense

effort would have only begun and in such a circumstance it would be a tremendous advantage to be able to build warships on these easily protected inland seas. In this connection it should be remembered that we would begin building these ships long before completion of the waterway project, so that they would be ready for use the moment the St. Lawrence was opened to them.

And even if the war ends in an early victory for England, this new waterway would be of great benefit in the reconstruction period to follow. The world's supply of ocean freighters will have been depleted, and the Great Lakes could help replenish the merchant marine. Moreover, if at that time it is possible for ocean commerce to penetrate the granary of the North American continent, the feeding of half-starved Europe will be easier and less expensive.

In this vast struggle of which we are now a vital part, we cannot afford to overlook any possible future contingency. To argue against the St. Lawrence waterway and power project on the ground that it might not be needed for defense is both specious and foolhardy.

THE *Detroit News* stoutly rebukes the "selfish interests" of seaboard opposition to the plan (while implying that the support of Great Lakes cities coincides with the high principle of patriotism) editorially as follows:

> From the beginning, opposition to the seaway has been inspired by the narrowest of sectional and special-interest motives. It has come from seaboard port interests, jealous of their monopoly of sea-borne trade, from the railroads serving the seaboard, and so forth.
>
> Thus attention directed to the subject of lake shipbuilding may be expected to arouse opposition in every seaport city now the home of a Navy yard, every city where ocean shipbuilding of any kind is a prized local industry.
>
> Perhaps we are wrong in saying "every" such city; we hope so. In the past, whenever narrow selfish interest has been ranged on the floor of Congress against the national interest on this issue, patriotism has taken a licking. But that may not hold true this time.
>
> Surely it should not. The seaway does not need the defense argument, but only its over-all contribution to national efficiency, to justify it. But surely the defense argument ought to silence opposition altogether, considering that this ability to build ocean shipping on the lakes of itself may spell some day the exact difference between national survival and national disaster.

Notwithstanding the numerical preponderance of press opposition, however, it is generally believed in Washington, as stated above, that the latest proposal of the Roosevelt government will be aided by the magic words "national defense" and will be approved by both branches of Congress, although the vote may be surprisingly close. That, at least, was the consensus of experts as of mid-April.

—F. X. W.

The FPC Annual Report

THE Federal Power Commission, in its recently issued twentieth annual report to Congress, urged a broadening of the Natural Gas Act in the interests of conservation and the more effective regulation of the natural gas industry. The report also summarized the commission's administration of the Natural Gas Act since its passage in 1938.

Under the existing statute, the report said, the commission has authority to regulate rates charged for the transportation and wholesaling of natural gas in interstate commerce, to grant certificates of convenience for proposed new pipe lines extending into the market area of existing companies, to direct extensions of existing pipe lines where existing markets will not be adversely affected, and to control the exportation of natural gas. The report said:

> Already, under this legislation, successful steps have been taken to reduce natural gas rates. But the applications for authorization of new transmission pipe lines raise fundamental issues of conservation which cannot be settled in the public interest without a broadening of the act.

To meet the needs of conservation and broaden its powers to protect the public interest in connection with the transportation and sale of natural gas in

interstate commerce, the commission offered the following legislative recommendations:

It was urged that § 7(c) of the act be broadened to give the commission control over all new interstate natural gas pipeline construction through prohibiting the construction of any new lines utilized in interstate commerce until authorized by a certificate from the commission. The present proviso in the act permitting enlargement or expansion of existing facilities for supplying increased market demands in a company's present market area without a certificate should be retained, the commission said.

In commenting upon the need for a broadening of § 7(c), the report stated:

> It should be noted that the commission's jurisdiction over proposed new pipe-line construction is limited to those cases in which the new line will enter the market area already being served by another natural gas company. This limitation has serious disadvantages in terms of the general purposes of the Natural Gas Act. In the first place, as there is no precise definition of the market area of another natural gas company, the commission must decide in each instance whether or not it has jurisdiction. In the second place, it prevents any serious effort to control the unplanned construction of natural gas pipe lines with a view to conserving one of the country's valuable but exhaustible energy resources.

To support its contentions that control must be extended to cover all new interstate natural gas pipe-line construction, the commission pointed out the serious problem of energy resource conservation involved in a pending application for a certificate to permit the construction of a 1,500-mile pipe line from south Texas to New York city which would supply the tremendous markets available in the northeastern states. The report said:

> The Natural Gas Act as presently drafted does not enable the commission to treat fully the serious implications of such a problem. The question should be raised as to whether the proposed use of natural gas would not result in displacing a less valuable fuel and create hardships in the industry already supplying the market, while at the same time rapidly depleting the country's natural gas reserves. Although, for a period of perhaps twenty years, the natural gas could be so priced as to appear to offer an apparent saving in fuel costs, this would mean simply that social costs which must eventually be paid had been ignored.

THE report pointed out that the vital question of oil conservation was fused with natural gas economy by stating:

> There is an even more important question which should be answered before government sanction is given to large-scale delivery of natural gas to the great eastern industrial areas. That is the question as to whether rapid depletion of the country's natural gas reserves may not reduce for all time the country's potentially recoverable reserves of oil. In view of the tremendous importance of petroleum products in both peace and war, it would be a grave mistake to allow the quest for quick profits and temporary convenience to cut into our available petroleum supplies.
>
> Careful study of the entire problem may lead to the conclusion that use of natural gas should be restricted by functions rather than by areas. The commission is convinced that these conservation problems are of such preëminent importance, especially in the present world situation, that the Natural Gas Act should be immediately broadened to give the commission adequate power to resolve them in the public interest.

As a second recommendation, the commission asked that it be given the express statutory authority to compile and publish statistics of the natural gas and manufactured gas industries comparable with those now compiled and published concerning electric utilities under § 311 of the Federal Power Act.

The successful development of "statistical yardsticks" of rates and costs in the electric utility industry, the report said, is bringing about the most desirable form of regulation—self-regulation by the electric utilities themselves through "making every electric utility in the country, whether publicly or privately owned, a competitor of every other such utility, constantly testing its ability to maintain the lowest costs and rates and promote the highest average consumption."

The commission's statistical program, the report said, was directed to the ordinary citizen as well as the expert and its publications are designed to permit

appraisal of utility management policies and methods. The widespread use of these publications by the utilities, investment houses, underwriters, regulatory agencies, and consumers is evidence of the importance of "dynamic statistics" as a new technique of regulation, the commission said.

THE commission's third legislative recommendation with respect to the Natural Gas Act was that its rate regulatory authority be extended to interstate sales of natural gas for industrial purposes. Such authority over interstate sales by pipe lines for industrial purposes, the report added, "should cover direct sales to industries as well as sales for resale to the industrial customers of distributing companies."

This was asked, the report said, "in order to assure adequate protection of domestic and commercial consumers against unjust or discriminatory rates."

Terming the Natural Gas Act "an effort to bring a hitherto unregulated private industry into the regulated public utility class," the commission said that through passage of the statute the Congress gave recognition to the necessity for Federal control of the industry to fill the gap in the regulatory powers of state commissions with respect to the sale and transportation of natural gas in interstate commerce.

The mushroom growth of the natural gas industry following the successful transportation of gas through long-distance transmission pipe lines left state bodies powerless in many instances, the report said, to search the ramifications of such large enterprises to their source, far beyond the borders of the state. The report added:

> For this reason many of the commission's major rate cases, especially those involving natural gas, have been initiated as the result of complaint by state commissions or municipalities, seeking to close the loophole through which companies engaged in interstate sales were escaping regulation.

The report listed a number of comprehensive investigations, involving the entire rate structure and operations of the natural gas companies concerned, which the commission had undertaken as a result of complaints by state commissions or city governments since passage of the Natural Gas Act.

THE following important developments in electric and natural gas rate-making policy were reflected, the report stated, in the commission's formal decisions issued during the last year:

1. The insistence by the commission on a prudent investment rate base.
2. The insistence by the commission of the deduction of an adequate depreciation reserve from cost of property with a resultant lowering of rate base.
3. The use of the technique of ordering immediate rate reductions where justified before completion of the usually extended hearings.
4. The immediate removal of discrimination by requiring that the consumers of a given class be given the lowest rate available to any consumer of the class.

The report added that the commission was convinced "that these progressive steps are necessary to provide the certainty and reasonable dispatch without which rate regulation fails to afford the public with more than apparent protection."

To illustrate its efforts to effect immediate rate reductions, where justified, before the completion of extended hearings, the commission cited its order directing the Natural Gas Pipe Line Company of America to reduce its rates annually by $3,750,000 in response to a joint motion of counsel for the Illinois Commerce Commission and the Federal Power Commission. Although the hearings were still in progress at the time the motion was made, the record contained the company's entire case.

The decision that rates should be immediately reduced was, in effect, based on an allowance of 6½ per cent return on a rate base composed essentially of the company's estimates, particularly as to cost of property, excluding their figure for "going value." Prior to the motion, commission witnesses had introduced evidence as to "fair rate of return" and the company had been afforded an opportunity both to cross-examine such wit-

The (Baltimore, Md.) *Sun*

STOCK EXCHANGE PRESIDENT MARTIN BECOMES A BUCK PRIVATE

nesses and to introduce rebuttal evidence.

THE commission's order for an immediate reduction, which would have been passed on to consumers in the Chicago area, was stayed by three judges of the seventh circuit court of appeals on November 1, 1940, in the first appeal from a decision in a rate case under the Natural Gas Act. Subsequently, the commission order was vacated and set aside by the circuit court, because the commission failed to make a liberal enough allowance for the company's amortization period and for "going concern value." However, the commission allowance of 6½ per cent as a reasonable rate of return was upheld in the circuit court's opinion (See p. 633.)

In connection with its efforts to hasten the regulatory process, the commission said that it was seriously concerned with the fact that efforts for legislation dealing with procedure before Federal administrative agencies "seem to be proceeding on the premise that private interests must be further safeguarded against the claimed arbitrary actions of such bodies." The commission holds that steps should be taken to speed up rather than to delay the effective accomplishment of the regulatory purpose, and cited its efforts in that direction through adoption of prehearing conferences; promulgation of rules only after conference with interested parties and publication in the *Federal Register;* giving all parties ample notice of its proceedings with opportunity to present evidence, file briefs, and present oral argument; requiring independent written reports from its trial examiners; and other steps to assure all parties the "rudiments of fair play" in its proceedings involving electric and natural gas utilities. The report stated:

> The commission believes that sound thought on the subject must begin with the premise that the regulation of privately owned public utilities came into being in large measure as a substitute for competi-

tion in a field which had come to be considered as adapted to "natural monopoly."

Regulation, if it is to be a worthy substitute for competition, must similarly be able continuously to make it impossible for a public utility company to charge prices higher than it could charge if an efficient and economical competitor could reasonably be expected to enter the field and capture the market.

The commission, however, is convinced that the entire purpose of regulation will be defeated if steps are taken to afford private interests, basically opposed to the purposes of regulation, widened opportunity to adopt the status of aggrieved parties and, under the aegis of "due process," still further to delay and render futile sound regulatory efforts in protection of the public.

In the situation which prevails today, it is not the private interests who are the aggrieved parties, subject to arbitrary action of administrative agencies, but rather the consumers, subject to the arbitrary charges of monopoly which is protected against the control of sound regulation by the procedural latitude which monopoly today enjoys. And, in a larger sense, the whole people is aggrieved because the monopolistic tendency toward high costs and high prices is one of the fundamental sources of economic instability.

IN a significant opinion and order issued during the year, the commission found that it had no jurisdiction over the arm's-length sale of natural gas at the well mouth. The opinion and order terminated proceedings arising out of the commission's suspension of a proposed increase in rates filed by the Columbian Fuel Corporation for natural gas sold to the Warfield Natural Gas Company for resale.

Following hearings regarding the suspension, the company filed a special petition requesting a hearing as to the jurisdiction of the commission over the particular sale and over the Columbian company generally.

Sitting *en banc*, the commission heard oral arguments on the question and granted permission to intervene or file briefs to all interested parties, which included the public service commissions of Kentucky and West Virginia, the Mid Continent Gas & Oil Association, the Independent Petroleum Association of America, and the National Association of Railroad and Utilities Commissioners.

In addition to the 13 complaints relative to the rates and charges of natural gas companies which were filed by state commissions or municipalities, the commission has also handled 10 other such complaints since passage of the Natural Gas Act, the report said. These 23 complaints involved natural gas properties aggregating $800,000,000, or nearly a quarter of the book investment of the entire industry. Other phases of formal work since passage of the act were stated to be (a) the handling of 10 applications for certificates of convenience and necessity involving the granting of permission for the construction of nearly 7,500 miles of new pipe lines at a total estimated cost in excess of $227,000,000, and (b) 7 applications for a determination by the commission of its jurisdiction over particular gas operations.

THE commission is also engaged, the report said, in the pioneer task of bringing about a uniform accounting system among the natural gas companies subject to its jurisdiction with a view to the development of effective accounting control. The report said that such control with respect to electric utilities was already proving of great service to operating companies interested in establishing the conduct of their business on the soundest possible basis, to institutional investors and underwriting houses interested in appraising the true financial condition of utilities seeking financing, to all concerned with the interest of consumers, and to investors themselves.

Other activities include the assembling of information on natural gas operations; compilation of statistics for the commission's information; and the examination of rate schedules filed by natural gas companies under the commission's jurisdiction.

FEDERAL POWER COMMISSION'S TWENTIETH ANNUAL REPORT. 1940. Superintendent of Documents, Washington, D. C. 20¢.

The March of Events

May Lump Seaway, Dam Projects

INFLUENTIAL Senators were recently reported to be uniting behind an effort to link the St. Lawrence seaway project with the Florida ship canal, Tombigbee, Arkansas Valley Authority, and Columbia river developments in a billion-dollar omnibus waterways bill.

Attempts to line up the supporters of each of these projects in a solid bloc were described as only partly successful thus far. Some opposition was said to have developed from those who feared that the consolidation of such an ambitious program of hydroelectric power, navigation, and flood-control proposals in one measure would provoke "pork barrel" charges.

Senator Norris, Independent of Nebraska, one of those interested, said he was particularly anxious to see the proposed development of the Columbia river, the establishment of the Arkansas Valley Authority, and the St. Lawrence project placed in one bill. Norris added, however, that he would not favor inclusion of projects which might lose rather than gain votes for these three proposals, although he noted he had supported both the Florida canal and the Tombigbee projects previously rejected by Congress.

Southern Senators interested in the Florida canal and the proposed Tombigbee development in Alabama and Mississippi were said to have taken the initiative in attempting to weld a voting bloc of sufficient strength to force acceptance of all of the projects.

Strong Republican opposition to the St. Lawrence project was reported.

Congress on April 15th was urged by an eastern regional conference of labor, industrial, transportation, civic, and commercial groups held in Philadelphia to withhold approval of any legislation designed to put the agreement between this country and Canada for the Great Lakes-St. Lawrence waterway and power project into effect. It held that the plan was "contrary to the real and immediate needs of national defense."

A resolution asserted that construction of the project would deprive the two countries of labor, funds, and vital materials essential to immediate defense requirements; it would require four years or more to complete the first stage of development to provide a limited amount of power and a much longer time to complete the navigation features of the project; and it would "not provide" for the construction and use of shipbuilding facilities on the Great Lakes within the time required to meet emergency needs as now foreseen.

Floyd L. Carlisle, chairman of the Niagara Hudson Power Corporation, last month told stockholders at their annual meeting that when the huge hydroelectric power development on the St. Lawrence river is completed the utility system would stand ready to market such power, except that sold at the dam site, through its own facilities and to pass on to consumers whatever savings may result through the absence of taxation and low-cost government money used in construction.

The northern part of the Niagara Hudson system would be affected directly by the St. Lawrence development. Declaring that he did not propose to discuss the merits or demerits of St. Lawrence power, Mr. Carlisle expressed the opinion that the "soundest and most economical" way to utilize the new power would be to sell it at the dam site, first to war industries and in the later stages at wholesale prices at the points of generation. In this way, he indicated, both the state of New York and the Federal government would find it unnecessary to spend large sums of money for transmission and distribution facilities, since the private power companies operating along the northern border of New York state already had such facilities in operation.

Priorities Division for Utilities

EVERYTHING that goes into the establishment of an electric power plant, which is not already included in other priority listings, was included under a power plant equipment list which will be handled by a new division established in the Office of Production Management.

The move to create a division for handling priorities in turbines, generating equipment, boilers, and other necessary parts of a power plant was in anticipation of a major power expansion push by both the Federal government and private industry. It was learned that only a handful of applications for priorities had been requested for power plant equipment so far, but officials anticipated that the power plant equipment demand would present a major problem in the future.

Officials said they looked with favor on requests for expanding electric power production facilities and that everything possible would be done to give these requests right of way for necessary parts and materials.

FPC Power Industry Survey

THREE hundred and eighty-three electric utility companies in the United States with assets and revenues composing more than 95 per cent of the entire privately owned utility industry, had combined revenues of $2,271,360,715 in 1939, the Federal Power Commission reported last month in its annual publication, "Statistics of Electrical Utilities in the United States."

SEC Clarifies EEI Status

IN a recent letter to the Edison Electric Institute, Joseph L. Weiner, director of the public utilities division of the SEC, clarified various questions which had been raised over the recent registration of the EEI under the Holding Company Act. The withdrawal of certain members from the EEI has been viewed in some quarters as an indication of concern over the possibility of member companies becoming subject to the control of the SEC. The gist of Mr. Weiner's letter was as follows:

1. That the EEI is itself subject to registration.

2. But that members of the EEI do not thereby become subject to SEC jurisdiction in the absence of affirmative action by the SEC with respect to each particular member.

3. That,—while the SEC under its investigation powers contained in §§ 2 (a) (7) and 2 (a) (8) might theoretically, at some future time, enter upon a proceeding for the purpose of determining whether individual members of the EEI are subject in any way to SEC control by reason of their membership, such action would only be taken after notice and hearings, and after a formal determination, based upon evidence, that the relation of EEI to a particular member is that of holding company and subsidiary, respectively.

4. Even assuming the beginning of such a procedure under §§ 2 (a) (7) and 2 (a) (8), and assuming the finding by the commission that the EEI possesses holding company control over its members, there would thereupon be sufficient and timely opportunity for EEI members not desiring to become subject to SEC jurisdiction to remove the basis for the same by dissolving their relationship with the EEI.

5. That the SEC does not now contemplate any such proceeding under §§ 2 (a) (7) and 2 (a) (8); and that there is, in Mr. Weiner's opinion, no present occasion for commencing any such proceeding.

6. That inasmuch as the regulation of the EEI as a "mutual service company" could not affect the business affairs of its members, except as to allocation of costs, etc., it is unnecessary at this time to go into an examination of that question.

It was expected that similar assurances might be forthcoming for the American Gas Association which was also considering registration under the Holding Company Act.

Chamber Considers National Resources

REGULATION and production in basic defense industries—petroleum, power, mining—were reported and interpreted by outstanding authorities in the natural resource industries at the twenty-ninth annual meeting of the Chamber of Commerce of the United States.

Representing 1,600 affiliated chambers of commerce and trade associations, more than 2,000 business leaders were estimated in attendance after the meeting in Washington, D. C., April 28th to May 1st. Business problems springing from the world crisis were analyzed at the meeting, whose theme asked the urgent question: "What's Ahead for America?"

"The task of harnessing business and industry to the defense program presents a variety of vital topics for consideration and analysis," said a chamber statement. "In the first rank of these topics is the relationship of natural resources to defense."

A leading exponent of rights of states in their natural resources, Colorado's Governor Ralph L. Carr spoke on "Federal Encroachment through Regional Authorities." A lawyer by profession, Governor Carr has been identified with a number of natural resource businesses, particularly in the field of mining. Governor Carr's paper will be subsequently reviewed in this magazine.

Arkansas

Investigator Appointed

APPOINTMENT of P. A. Lasley, of Little Rock, as special attorney for the state department of public utilities in special investigation of certain matters, was announced on April 16th by Ben E. Carter, chairman of the utilities commission. Mr. Lasley retired as chairman of the commission when Governor Bailey took office in 1937. He previously had been chairman of the fact-finding tribunal, which later became the utilities commission.

The matters to be investigated, Mr. Carter said, are the alleged differential between interstate and intrastate telephone tolls by the Southwestern Bell Telephone Company; the supply of electric power available for new manufacturing plants; liability of the Arkansas Louisiana Gas Company for payment of the state utility tax on pipe-line sales to industrial consumers, dating back to 1935; and wholesale gas rates charged the Arkansas

Power & Light Company by the Mississippi River Fuel Corporation.

Low Rates to Be Maintained

THE state utilities commission directed the Louisiana-Nevada Transit Company last month to maintain its present level of natural gas rates and relieved the firm of a condition of refunds required when the company received a state permit on December 22, 1939.

The original order provided that the firm's records would be audited at the end of the first year of operation to determine what refunds, if any, would be made. The provision was included because the estimated earnings appeared "to be in excess of a reasonable return, although the rates charged by the company were lower than any gas rates in effect."

The department at that time indicated it desired to base any change in rates upon a year's actual operation. The recent order said the department had investigated the first year's operations and "finds that the customers are well satisfied with the rates and are not desirous of refunds."

The company was granted authority to compete with the Arkansas Lousiana Gas Company in southwest Arkansas. Its industrial rate is 10 cents per thousand cubic feet.

Connecticut

Rural Electric Bill

A BILL providing for the extension of electrification in rural areas was favorably reported to the state senate by the public utilities committee on April 10th.

The legislation would provide that coöperative, nonprofit, membership corporations may be organized to supply electric energy and promote and extend its use to persons in rural areas who are not receiving central station service. The coöperatives would be able to buy or sell or otherwise acquire and distribute electric energy to members, government agencies, or political subdivisions. They would be authorized to build, buy, or lease transmission lines and generating plants and would be able to sell and help install electrical equipment. Likewise, they would be able to hold other property, borrow money, and issue bonds and notes.

The Republican-controlled house judiciary committee of the general assembly subsequently voted a favorable report on a rural electrification bill directing all public utility companies in the state to extend their lines in all chartered territory wherever the density of subscribers averages two to the mile on proposed new lines.

Action of the Republicans came shortly after the Democratic-controlled senate had voted a Hurley administration rural electrification bill, providing for the formation of nonprofit coöperatives to get money from the Federal government with which to extend electric service to rural areas now without it.

The bill the senate adopted, when it reached the house, would be sent to the judiciary committee. A similar course on the house bill was open to the senate, with reference to the senate public utilities committee. This, it was said, would set the stage for another tug-of-war between the politically opposed majorities in the two branches from which would emerge no legislation at all on the subject unless one or the other yields, or a compromise is reached.

The house bill provided that the state public utilities commission, in prescribing the rate for service on new lines operated under the measure shall not permit a guaranty of more than $13.50 a mile a month. The present guaranty required by the companies for extending their lines is $17.25 a mile a month, and is not fixed by statute, but by the companies themselves.

District of Columbia

Easing of PUC Rules Asked

ELIMINATION of the restriction providing that nominees for a position on the District of Columbia Public Utilities Commission must not have voted in the three years previous to their appointment was proposed on April 14th by Senator Pat McCarran, Democrat, of Nevada.

McCarran at the time was conducting an investigation into the nomination of Gregory Hankin, Federal Power Commission attorney, to the commission. In studying the law governing the appointment of commission members, McCarran came upon the provision concerning the vote.

The Senator pointed out that the language of the provision states that the nominee must not have voted "in any other place." Since no one can vote in the District, "it seems he could not vote anywhere. I think the restriction is unnecessary and limits the President in selecting men for the commission."

Hankin's nomination was being checked by McCarran with the approval of the subcommittee appointed to handle the appointment.

Georgia

Rural Power Rate Cut

THE state public service commission on April 15th ordered sharp reductions in electric power sold wholesale by the Georgia Power Company to rural electrification associations and municipalities in Georgia, bringing about total savings of approximately $175,000 per year.

This action was taken after a public hearing during which members of rural electrification associations protested against the present high rates. An agreement on the rates was reached during a conference between the commission and power company officials.

Walter R. McDonald, chairman of the commission, said the changes would become effective within the next thirty days.

A 20 per cent reduction was ordered in the power purchased by the rural associations. Based on last year's consumption, this would mean a savings of approximately $55,000 a year, McDonald said, although he predicted it would be more for 1941. The revised average rate will be slightly less than one cent per kilowatt hour, the commissioner pointed out. This puts Georgia below the national average.

Approximately 40 municipalities that purchase their power from the Georgia Power Company will be affected by the other revision in rates, which was about a 12 per cent reduction. McDonald estimated the saving to those municipalities affected would be around $120,000 a year.

Rates affecting the Georgia Power & Light Company will be acted on later, the commissioner said.

Indiana

Rates Cut in Sale

IMMEDIATE reduction of gas rates for Terre Haute and the other cities and towns affected by the sale of the divisions of the Indiana Gas Utilities Company was announced last month by H. L. Comin, plant manager of the Indiana Gas & Chemical Company at Terre Haute.

The newly formed Terre Haute Gas Corporation on April 8th purchased the Terre Haute and Brazil divisions of the Indiana Gas Utilities Company. Purchase price was $1,250,000. The two divisions serve users in Terre Haute, West Terre Haute, Clinton, Seelyville, and Brazil.

An order was issued March 25th by Judge Vincent L. Leibell of the United States Court of the southern district of New York, permitting the Associated Gas and Electric Corporation to sell the physical properties of its subsidiary to the Terre Haute Gas Corporation, according to terms approved by his court and the Indiana Public Service Commission.

Trial of the suit of Bert Dickens and Ione Jones to prevent the state commission from authorizing sale of the Indiana Gas Utilities to the Terre Haute Gas Corporation opened on April 15th before Judge Martin L. Pigg in Sullivan Circuit Court on a change of venue from Vigo county.

A motion by the defendants to strike out certain parts of the complaint was granted by Judge Pigg but he refused to overrule the general complaint.

SEC Approves Consolidation

CONSOLIDATION of five Indiana public utilities, serving 600 communities in the central and southern areas of the state with electric energy, gas, and water, was approved by the Securities and Exchange Commission recently. The combined value of all assets of the consolidation, effective June 1st, if approved by the stockholders, was placed at $123,245,785. Companies to be consolidated are: Public Service Company of Indiana; the Terre Haute Electric Company, Inc.; the Central Indiana Power Company; the Northern Indiana Power Company; the Dresser Power Corporation. The latter two are subsidiaries of Central Indiana Power Company.

Under the consolidation plan, $11,983,000 of deferred dividends will be paid either in cash or new stock.

The new company will be known as Public Service Company of Indiana, Inc. Authorized capital stock will be 2,300,000 shares of which 300,000 shares of the par value of $100 each will be preferred stock and 2,000,000 shares without par value will be common.

Kansas

Gas Assessment Reinstated

THE state corporation commission recently announced its assessment on natural gas production in Kansas would be reinstated May 1st because of a shortage of funds available for administration of gas conservation.

The assessment of one-half mill on each

1,000 feet of gas produced in the state was suspended in July, 1940.

In reinstating the levy the commission said, "the monies available to defray the cost and expenses of administering the Natural Gas Act have gradually been reduced until they will not be adequate to defray future expenditures unless they are supplemented by new receipts."

Massachusetts

Gas Rates Cut

NEW rates which will lower the cost of gas to domestic users for kitchen heating and house heating were filed by the Boston Consolidated Gas Company with the state department of public utilities recently, effective on meter readings made on and after May 1, 1941. The company estimated that reductions would average 6 to 13 per cent.

At the same time the company filed new space heating rates applicable to commercial and industrial customers.

The new residence heating rate for customers in Boston, Brookline, Chelsea, Milton, Newton, Quincy, Somerville, Waltham, Watertown, Wellesley, and Weston will be available to all families using gas for house heating or kitchen heating. It will also be available in homes where at least half the annual amount of gas consumed is used for heating purposes.

Missouri

Water Bill Killed

STATE Senator Joseph A. Falzone of St. Louis county, who sponsored the widely criticized bill to confer sweeping powers on the county court to purchase and operate the St. Louis County Water Company, killed his own bill on April 15th.

In a letter to Senator Clinton T. Watson, chairman of the senate committee on county courts and township organization, which had the measure under consideration, Falzone asked that no action be taken for ten days. Within that period, his letter said, a substitute bill eliminating features of the present measure which have been criticized might be offered. If it were not, he added, he would request the committee to recommend to the senate that his bill be not passed.

Falzone said he had reached the definite conclusion that his bill should be corrected in certain particulars.

The St. Louis County League of Municipalities, composed of mayors and other officials of most communities in the county, had previously gone on record as opposed to the bill of Senator Falzone.

Mayors of 12 county towns, meeting at University City, unanimously adopted the report of a committee which had been named to study the bill. The committee's objections, set out in a 5-page report, were chiefly on the following points:

The bill sets no limit on the price which the county court might pay for the waterworks, or the amount of revenue bonds it might issue.

Municipal ownership of a utility is a governmental policy which should be determined by a vote of the people.

The only limitation on salaries which a county-owned waterworks might pay is contained in a provision for a board of water commissioners, each of whom would get $1,500 a year.

The bill permits an interest rate as high as 6 per cent on the bonds, regarded as too high in view of bond market conditions.

It permits a private sale of the bonds by the county court, instead of sale by competitive bids.

If the county is to acquire the waterworks, the committee's report said, it should be done under a bill which would require an appraisal of the property by a competent commission, and require submission to the voters of a proposition setting out the maximum amount of bonds to be issued.

Two other bills which would authorize the county to acquire the waterworks had also been introduced. Both contained important provisions safeguarding the public interest.

New York

Approves Transit Bill

THE Wicks Anti-Railroad Sabotage Bill, which was the subject of a spirited hearing on April 14th before the governor, became law on April 15th, when Governor Lehman announced his approval of the measure. The bill was sponsored by Mayor La Guardia,

with an eye toward the possible strike of the Transport Workers Union on the city's transit facilities in June.

In a memorandum accompanying his statement that he had signed the bill, Governor Lehman followed the line of argument taken by the mayor at the hearings, and voiced the attitude which the governor himself and Lieutenant Governor Charles Poletti indicated at the end of the hearing that they held. The governor denied that the measure limited lawful strikes, or other legitimate rights of labor.

The governor's detailed statement as to the bill's intent was believed designed to put on record the intent of the measure, so that the courts, in seeking legislative intent, would have guidance in the matter.

The Wicks bill is an amendment to the old railroad antisabotage law which has been on the books of the state since 1881. As originally enacted, it applied only to steam railroads and contained penalties up to twenty years in jail if the safety of any person was endangered by an act of sabotage and up to five years in jail if safety was not involved. These penalties were left untouched in the Wicks amendments, which now include all trolleys, busses, and subways, publicly or privately owned, in the scope of the law.

The city and the board of transportation on April 9th began an action intended to obtain from the supreme court a declaratory judgment holding that they have neither the power nor the duty to observe, extend, or renew the principal terms of the collective bargaining agreements between labor unions and the managements of the IRT and B-MT lines, assumed by the city at the time of transit unification.

In the court test the mayor said he would seek a showdown on the demands of the TWU for a closed shop contract with the city covering all city transit employees to replace the contracts with the IRT and the B-MT systems that were taken over by the city and which expire June 30th.

Oregon

Utility Taxes

PUBLIC utilities in Oregon will pay $6,915,816 in taxes during 1941, or 16.6 per cent of the total property tax bill in the state, the state tax commission said last month.

Electric companies will pay $2,699,496, steam railroads $2,594,565, telephone companies $905,602, water companies $79,529, electric railroads $77,781, tank car companies $54,407, gas companies $397,066, and telegraph companies $43,029.

Multnomah county will receive the largest amount from the utilities, $2,744,390. Klamath county is next with $425,886, followed by Clackamas with $417,920.

Pennsylvania

Complaint Withdrawal Denied

A NEW twist was injected into what has been called by two state commissioners "the most important case to come before the public utility commission" when counsel for the Adams Electric Coöperative, Inc., on April 9th moved to withdraw its complaint against the Pennsylvania Power & Light Company.

The commission, however, by a vote of 3 to 2, with Commissioners Richard Beamish and Thomas Buchanan dissenting, decided to continue the case, which is now two months old.

The motion for nonsuit was introduced at the resumption of the hearing before the commission on the complaint that the PP&L violated public utility law by "invading" territory preëmpted by the coöperative in the Big Spring area, Cumberland county, on January 30th.

William Wise, representative of the Rural Electrification Administration, who is acting as counsel for the coöperative, revealed at the same time that construction of the coöperative's lines in the contested area has been completed. In asking that the case be dropped, Wise said the coöperative had been able to build its lines, and service to members "will not now be frustrated by the utility."

Objection to withdrawal of the case was expressed by Arthur H. Hull, counsel for the PP&L, on the grounds that "it would leave us just where we were when proceedings were started."

Commission Chairman John Siggins, in stating that the commission had voted to deny the motion for withdrawal, advised that representatives of the coöperatives and the utility "get together" to work out the issues in the case.

The commission is also actively engaged in a general rate case proceeding against the Pennsylvania Power & Light Company, which has been going on for some time. The case was started on March 17, 1935, by the mayor of Bethlehem, who complained against the company's rates. Reductions totaling approximately $5,700,000 a year have been effected.

South Carolina

Backed for Utility Control

IF the privately owned utilities which the South Carolina Public Service Authority (in charge of the Santee-Cooper project) is seeking to buy are to be sold to a public agency, that agency should be the Lyles-Ford Authority, Senator J. M. Lyles, of Fairfield, told the state senate judiciary committee recently, which had before it his bill to require that purchases by public agencies of private property be first approved by the general assembly.

On April 16th, in augmenting his remarks before the judiciary committee, Senator Lyles projected the idea that the Lyles-Ford Authority should sponsor the development of the rivers of the Santee-Congree river basin above Columbia, and that Santee-Cooper should confine its activities to that portion of this basin below Columbia. The Lyles-Ford Authority, he pointed out, was created in 1934, the same year that brought the creation of the state authority.

"But it begins to appear we are going to be left out of it if Santee-Cooper is going to come right up in our territory and buy the utilities there," the Fairfield senator said.

Properties the Santee-Cooper proposes to buy are those of the South Carolina Electric & Gas Company, some of which are located at Parr Shoals, in Fairfield county, and of the Lexington Water Power Company, which owns the Lake Murray hydro development, in Lexington county.

Tennessee

City Utility Earnings Up

INCREASED use of electric power has resulted in a 30 per cent increase in the net income of the Knoxville city utilities board for the first quarter of the year, compared with the same period a year ago, it was reported recently by Max Bartlett, general manager. The net was also 118 per cent over the corresponding period two years ago.

Meanwhile, power customers increased from 34,451 last year to 37,660 this year, he reported.

Net income for the first quarter this year was $129,061, compared with $99,088 for the first quarter of last year and $59,167 for the same period of two years ago.

Purchased power during the first quarter of this year totaled 65,102,000 kilowatt hours, compared with 54,017,000 kilowatt hours for the same period a year ago.

Texas

Would End Profit Plan

THE Houston city council voted unanimously on April 14th to serve notice to the Houston Lighting & Power Company of the municipality's intention to terminate a profit-sharing agreement in effect for twenty-seven years.

Lewis Cutrer, the city's attorney, and Hugh Z. Buck, employed by the council as an attorney some time ago, recommended the action. In their report they found that the profit-sharing agreement did not meet the requirements of proper public utility regulation; the company had interpreted the agreement so as to make unwarranted profits; the company's system of accounting had deprived the city of a proper share in the profits; and the company's allowable rate of return on its investment—7 per cent as an operating profit and 3 per cent for depreciation—was excessive.

The council indicated that it might move to recover $2,000,000 to $3,000,000 which, the attorneys maintained, was due to the city under a proper interpretation of the agreement. No specific plan was adopted, however. Members also discussed the possibility of reducing light rates charged by the company, but took no action at the time.

The utility company is owned by National Power & Light Company, a subsidiary of Electric Bond and Share.

Utah

Asks Part in Study

THE state public service commission recently asked to be represented at a hearing scheduled to be conducted in Salt Lake City on May 5th by the Federal Power Commission to ascertain certain facts with respect to cost studies of the Utah Power & Light Company.

On April 7th the Federal Power Commission ordered the power company to produce certain original cost records of acquired properties, and set May 5th as a time to discuss the matter.

Last July the company filed with both Federal and state commissions its own cost study, which was being checked. In the process of checking it was found that certain records of predecessor companies were missing, having been lost or destroyed before or since those companies were taken over by Utah Power & Light.

Washington

May Tap City Light

POWER needs of aluminum factories probably will force the Bonneville Administration to buy electricity from Seattle and Tacoma this summer, Administrator Paul J. Raver said recently. Contracts call for more power than is available at Federal dams, he explained, citing that the Aluminum Company of America at Vancouver, Washington, is to get additional power June 1st and the Reynolds Metals Company has signed for power June 15th.

Between 20,000 and 50,000 kilowatts will be needed until Grand Coulee dam's first 108,000-kilowatt generator and Bonneville dam's fifth unit of 54,000 kilowatts go into operation August 1st.

Raver explained that "due to these large orders and others signed because of the defense boom, we have simply gotten ahead of ourselves. We have an interchangeable contract with Seattle City Light and Tacoma City Light and the way it looks they will likely be called upon to help us out of a tight situation."

Wisconsin

Rate Reduction Planned

A RATE reduction program that may result in cuts of $400,000 to gas and electric customers of the Wisconsin Public Service Corporation in 145 communities in 20 central and northeastern Wisconsin counties was announced by the state public service commission last month.

Reduction would affect gas customers and residential, commercial, power, and miscellaneous electric users.

Negotiated by representatives of the Wisconsin Public Service Corporation and the commission, some of the reductions would go into effect immediately. Last year the corporation under a similar program reduced its rates about $200,000.

Lower Taxes for Rural Lines

TAXES on the lines and equipment used directly by electric utilities to serve rural customers would be reduced "so that the rates charged rural electric customers can be reduced" under a proposal offered to the state assembly last month by Assemblyman Walter Cook, Republican of Unity. The measure would not apply to coöperatives.

Cook's measure proposed to tax utility lines and equipment that serve rural customers directly, 3 per cent of the revenue derived from the sale of electric power to those rural customers. Under present law, the tax was based upon the assessed value of the utility's property.

The present taxing system would remain in effect for the taxation of lines and equipment that are used to serve other than rural subscribers.

Utilities Taxed More

WISCONSIN will realize an additional $100,000 annually under a slight upward revision of the state tax rate on properties of railroads, public utilities, telegraph, and express companies, it was announced recently by Elmer E. Barlow, commissioner of taxation.

These groups paid the state $13,284,564 on their 1940 assessment, of which $4,560,000 was contributed by railroads operating in Wisconsin and $7,457,095 from utilities.

Price Ruling Upset

REVERSING an order of Circuit Judge A. C. Hoppmann upholding a price of $25,000 for acquisition of the Pardeeville Electric Light Company, by the village of Pardeeville, the state supreme court on April 15th ordered new proceedings by the state public service commission to fix a value as of the time of the commission order.

The utility contended that the just compensation for the property as determined by the commission was unlawful because it was not fixed on the basis of the value as of July 18, 1938, the date of the commission order.

In an opinion written by Justice Joseph Martin, the supreme court said that it appeared from the face of the order that the commission fixed the amount of just compensation as of December 31, 1935, two years, six months, and seventeen days prior to the date of the commission order.

The Latest Utility Rulings

Court Reverses FPC on Amortization Value of Pipe Line

In a decision which expressly recognized the difference in the risk between natural gas pipe-line operation and other utility enterprises, the United States Circuit Court of Appeals in Chicago handed the Federal Power Commission its first major gas rate reversal. By a unanimous decision of Circuit Judges Evans and Sparks and District Judge Lindley, the court set aside the commission's order directing the Natural Gas Pipe Line Company of America to cut rates $3,750,000 a year. The court differed with the commission on two points—plant amortization and "going concern value" — but agreed with the commission's allowance of a 6½ per cent rate of return as fair.

The commission had ruled that a 23-year period of amortization for plant investment should be used in fixing rates. But the court upheld the company's contention that the period for amortizing the value of its property should be the fourteen years and five months' interim between the time the property became subject to Federal regulation and the estimated exhaustion of its natural gas wells. The court noted that the relative risk of a pipe-line company was much higher than that of other utilities, and observed that the company was organized before Congress had adopted a statutory policy of regulating the natural gas business. In other words, when the enterprise was started the company was free to contract for the sale of its product to anyone at any price. A shorter amortization period under the circumstances might conflict with the Fifth Amendment, the opinion stated.

In allowing $8,500,000 for "going concern value," the court said that the losses of the pioneering years indicated a speculative investment which required great managerial skill to produce an adequate return. "Under such circumstances it seems that fairness necessitates the capitalization and inclusion of such skill—aye, and hazards—as legitimately as the cost of pipes," the court stated. It was expected that the FPC would appeal the case to the United States Supreme Court. *Natural Gas Pipe Line Co. of America v. Federal Power Commission (USCCA).*

Liability of Absence of Arm's-length Bargaining Held a Bar to Underwriter's Fees

Morgan Stanley & Company has been held by the Securities and Exchange Commission to stand in such relation to the Dayton Power & Light Company that there was liable to have been an absence of arm's-length bargaining between them with respect to the issuance and sale to the public of first mortgage bonds of the Dayton Company, within the meaning of paragraph (a) (3) of Rule U-12F-2. Additionally this rule has been held by the Securities and Exchange Commission to be valid under the provisions of the Holding Company Act, particularly §§ 6(b), 12(f), and 2(a)(11)(D).

This rule, briefly stated, restricts underwriters' fees where there is an affiliation between the underwriter and the issuing company. The word "affili-

ate," as interpreted by the commission, has a broad meaning. Section 2(a)(11)(D) of the act is held to supplement subdivisions (A) to (C) so as to extend the definition of affiliate to those intangible relationships resting "upon reasonable inferences and conclusions drawn from the basic facts" which are dependent upon something less than control or controlling influence and something that may be different from interlocking directors or officers or prescribed amounts of stock ownership. The record in this case was said to contain facts showing more than a relationship based upon "emotional and psychological affiliation."

The commission reviewed the genesis, historical development, and continued existence of relations between Morgan Stanley and J. P. Morgan & Company, and the United Corporation, with its subsidiary, Columbia Gas & Electric Corporation, and its subsidiary, Dayton Power & Light Company, the company involved in this decision. The commission observed:

> The record facts show not the casual affinity borne of mutually satisfactory financial relations, but ties and connections that, though less than control, are nevertheless sufficient to establish a relationship between Morgan Stanley and Dayton, at the time of the Dayton financing, such as is embraced by the rule. Our conclusion is reached despite the elimination, upon the Supreme Court's Electric Bond and Share Company decision, of some of the more superficial indicia of Morgan influence in the financial affairs of the United system.

Briefly stated, the facts as found by the commission were as follows: Morgan Stanley & Company, the underwriter, had begun business under the auspices of members of J. P. Morgan & Company, and members of the latter had retained stock. J. P. Morgan & Company was interested in the United Corporation, which in turn held stock of the Columbia company, a parent of the Dayton Company.

The rule was said to be applicable if the underwriter stands in such relation to the issuer that there is liable to be or to have been an absence of arm's-length bargaining with respect to the underwriting transaction between them. Under these circumstances, said the commission, free and independent competition plays no part in the selection of the underwriter. It continued:

> When there is a continuing financial relationship which has come about through banker participation and influence in utility holding company affairs, it is reasonably probable that arm's-length bargaining will not prevail in dealings between the issuer and banker. In such cases, the issuer lacks the protection of competitive conditions, and there is liable to be an absence of arm's-length bargaining. At no time since 1935 has any attempt been made by Columbia subsidiaries to secure financing on a more favorable basis from investment bankers other than Morgan Stanley. It is this type of situation, among others, which we believe Congress intended to eliminate when it passed the act.

The commission, in upholding the validity of Rule U-12F-2, carefully considered the interrelationships between various sections of the Holding Company Act, the purposes of their enactment, and the effect of provisions in one section upon the interpretation of other sections, giving particular attention to §§ 6 and 7. *Re Dayton Power & Light Co. et al. (File No. 65-3, Release No. 2654).*

Duty to Select Rate Classification

A MOTION for summary judgment dismissing a complaint against an electric company was granted in a case before the city court of the city of New York, where it was found that there was no proof of fraud or of an express promise or undertaking by the company to select a service classification for certain customers. The court said that there was no duty imposed upon the company by law to select the classification, but that customers made their own selection.

A change in 1937, said the court, was due to the fact that the classification

under which the customers were then being serviced was broken up into two parts: (1) Residence and (2) general service. The court continued with the following statement:

> As plaintiffs conducted a business, they could not be put into the residence classification, and it was proper to classify them as receiving general service. Bills were regularly received by plaintiffs which showed the classification, and the charges made were paid by them without protest and either with knowledge of the facts or with the means of knowledge or information within their reach.

The court cited as authority the rulings in Silver's Lunch Stores *v.* United Electric Light & P. Co. 142 Misc 744, PUR1932B 458, 255 NY Supp 515, modified and affirmed 146 Misc 554; Stern Bros. *v.* New York Edison Co. 251 App Div 379, 381. *Binder et al. v. Consolidated Edison Co. of New York, Inc.*

Competitive Bidding for Securities of Holding Companies and Subsidiaries

COMPETITIVE bidding for securities has long been a highly controversial subject and has received the attention of both Federal and state authorities. The Securities and Exchange Commission, in adopting Rule U-50 under the Holding Company Act, has decided that competitive bidding should be required in the issuance and sale of securities of registered gas and electric holding companies and their subsidiaries. In an accompanying statement the commission set forth the considerations that led to adoption of the rule.

The express purpose of Congress in enacting the Holding Company Act, said the commission, was to meet the problems and eliminate the evils connected with holding companies and their subsidiaries which Congress found to have become persistent and widespread, and it was the intention of Congress to put a stop to "those evils," which, among others, Congress found to occur when there is a "lack of economics in the raising of capital," or when subsidiaries enter into transactions in the absence of arm's-length bargaining, or where there is restraint of free and independent competition. The act establishes a class defined as "affiliates" and contains special provisions for rigid control of transactions between affiliates.

The detailed regulations, with respect to competition and arm's-length bargaining, the commission continued, are readily recognizable as following in the same tradition as the Sherman Act, the Clayton Act, and the Federal Trade Commission Act.

The commission declared that its attempts to perform the duties imposed by Congress without resort to competitive bidding had been either inadequate or unworkable. After reviewing the history of competitive bidding under requirements by state authorities and emphasizing the duty of public utility holding and operating companies to obtain their capital at the lowest cost consistent with a sound financial structure, the commission reached the conclusion that competitive bidding was the proper means of meeting the problem.

Arguments against the rule were disposed of in a discussion of the relationship between the investment banker and the issuer, and an argument based on the ground of "free enterprise" was answered at length. Competitive bidding, it was said, would be of advantage to small dealers and underwriters.

Five exemptions are included in the rule. These cover distribution of securities prorated to existing holders pursuant to preëmptive rights or privileges or in connection with liquidation or reorganization; loans of a maturity of ten years or less not for resale to the public, where the lender is a monied institution and no finder's fee or other negotiation charge is paid to any third person; transactions whereby securities are acquired by a registered holding company or sub-

sidiaries under an order of the commission under § 10 of the act; securities transactions in which the issuer or vendor will realize less than $1,000,000; and the issuance and sale of securities as to which the commission finds that compliance with requirements of the rule is not appropriate. *Re Rule U-50 Requiring Competitive Bidding (Release No. 2676).*

Authorization for Underlying Carrier

An application for a certificate as an underlying carrier for an express corporation was denied by the California commission without prejudice. The commission held that it should be slow to grant a new certificate unless it is clearly shown that existing carriers, otherwise available as underlying carriers for an express corporation, either cannot provide satisfactory service or will not provide it.

It was said that no underlying carrier should be permitted to act in so arbitrary a manner as to render impossible the performance by an overlying carrier of a satisfactory public service, and that under such conditions it would be the commission's duty to take such steps as would insure the preservation of existing express service. *Re H. Frasher Truck Line et al. (Decision No. 34005, Application No. 20504).*

Ratio between Telegraph Charges for Ordinary And Urgent Messages

The Federal Communications Commission held that cost studies submitted in an investigation did not afford a basis for a mathematical determination of an appropriate ratio of charges by telegraph companies for urgent messages as compared with ordinary messages. Nevertheless, giving due consideration to the cost studies and to other evidence in the record, the commission concluded that the ratio should be reduced from 2 to 1 to 1½ to 1.

In the course of its opinion the commission said that the ratio must be justified largely on the basis of increased cost to the carriers in providing the higher grade of service, not on the basis of its value to any particular user or, in effect, the charge which the user can be made to bear.

Value of service, said the commission, has significance in the adjustment of rates in a matter of this kind only in considering the over-all effect of the rate upon the service in question and upon other services offered by the carrier. There was said to be nothing in the record to indicate that the double rate in effect was justified from any "value of service" standpoint, but that, on the contrary, a reduction would increase the benefit of the urgent service to all users who have a need for that service without degrading the benefit of the other services. *Re Telegraph Division Order No. 12 (T-9(a), Docket No. 2639).*

Method of Corporate Simplification

Where the continued existence of a registered holding company is found unduly and unnecessarily to complicate the corporate structure of a holding company system, and such holding company is found to have a subsidiary company which itself has subsidiary companies which are holding companies,

and where the common and Class B stocks of such subsidiary holding company held by the parent holding company are found to be without value, it is, in the opinion of the Securities and Exchange Commission, necessary and appropriate for the parent registered holding company to surrender for cancellation such common and Class B stocks of such subsidiary holding company in order to comply with the first and second sentences of § 11 (b)(2) of the Holding Company Act. This ruling was made in a proceeding under § 11(b) (2) where the commission granted a motion for a severance and separate disposition of certain issues. *Re International Hydro-Electric System et al. (File No. 59-14, Release No. 2494).*

Authority of Commission on Approving Plan For Municipal Plant Installations

IN proceedings before the Wisconsin commission to obtain approval of detailed plans and estimates for the installation of a Diesel generating plant, objectors raised several questions relating to the regularity of the procedure followed by the city in taking and allowing bids. The commission, however, ruled that it was not its function to adjudicate disputes of this character as to which there is a judicial forum. The commission continued:

> Our approval of the detailed plans and estimates will not impair any judicial remedy now available to the objectors if their claims can be substantiated. We conceive our duty in the premises to relate solely to a determination as to whether the plant if constructed and operated as now proposed will reasonably conform to the terms of the certificate heretofore issued to the city and will otherwise be in accordance with the public interest.

A previous order had authorized the installation subject to subsequent approval of the detailed plans and estimates, and the order of approval had used the expression "at a cost not in excess of $80,000." The detailed plans showed a cost of $85,000, but the commission was of the opinion that the plans and estimates should not be disapproved merely because of the differences in cost. It was said that the language of the earlier order was clearly inadvertent, since the finding referred to "an estimated cost of approximately $80,000," and it was not the intention of the commission to impose an arbitrary limit. *Re City of Fennimore (CA-1345).*

Other Important Rulings

THE circuit court of appeals, second circuit, held that after the Securities and Exchange Commission had dismissed a recapitalization proceeding following its order exempting the company from the provisions of the Holding Company Act, a recapitalization controversy became moot, and the commission had no further concern with the terms upon which the company's securities were issued. *Morris et al. v. Securities and Exchange Commission, 116 F(2d) 896.*

The United States Supreme Court held that the requirement of § 266 of the Judicial Code for a hearing by three judges on an application for an injunction against the enforcement of a state law on constitutional grounds is inapplicable to a motion made after dissolution of such an injunction for the assessment of damages, and that the two additional judges called in to assist in passing upon the application for the injunction should not participate in the consideration of the motion to assess damages. *Missouri Public Service Commission et al. v. Brashear Freight Lines, Inc. et al.*

A suit for damages because of discontinuance of electric service was decided adversely to a customer by the supreme court of Alabama, where there was evidence of interference with metering devices on the customer's premises. The court declared that the utility had the right to discontinue service without notice under rules authorized by the commission, and that a customer who had tampered with metering devices does not stand in the position, with the right to demand further service from the utility, as does one who has not been guilty of such an act. *Alabama Power Co. v. Dunlap, 200 So 617.*

The Federal District Court dismissed a complaint by a licensee to enjoin and set aside an order of the Federal Power Commission requiring a reduction in electric rates, the court holding that a petition for review filed with the circuit court of appeals was in accordance with § 313(b) of the Federal Power Act, that the circuit court had acquired exclusive jurisdiction, and that the filing of the record in the district court ousted such court from jurisdiction over the subject matter in question. *Safe Harbor Water Power Corp. v. United States et al. 37 F Supp 9.*

The supreme court of Michigan, in an action by a natural gas company against a public utility company to recover for failure to take a minimum quantity of natural gas specified under contract, held that the right to recovery was circumscribed by the Public Utility Act and the conservation rules and regulations of the commission restricting the withdrawal of gas. *Wolverine Natural Gas Corp. v. Consumers Power Co. 296 NW 660.*

The supreme court of Montana held that the statute regulating motor carriers did not govern persons engaged in transporting their own property, and that a wholesale grocery company, using its own trucks for delivering merchandise to customers, was not subject to regulation where no specific delivery charge was made. *Board of Railroad Comrs. et al. v. Gamble-Robinson Co. et al. 111 P(2d) 306.*

The California commission declared that on an application to issue $1,000,000 of bonds to reimburse the treasury of a public utility company for capital expenditures the commission is not called upon to approve all expenditures making up a reported reimbursed balance of $118,000,000, and authority to issue the bonds requested should not be construed as such approval. *Re Pacific Gas & Electric Co. (Decision No. 33907, Application No. 23986).*

The California commission, in authorizing express service between certain points, ruled that bad faith, warranting certificate denial, cannot be imputed to an applicant for continuing unauthorized service until required to discontinue, where past service was not willful but under color of a filed tariff and possession of an operative right was at least debatable prior to a desist order and denial of a writ of review. *Re Valley Express Co. (Decision No. 34006, Application No. 22264).*

The supreme court of Iowa, in upholding the action of a lower court which dismissed a suit to restrain a municipality from contracting for the construction of an electric plant, ruled that the court should not interfere with the discretion of municipal officers and their engineer in letting a contract on the basis of labor and materials, and not separately, without competitive bidding; that municipal officials have discretion to determine the capacity of such a plant; and that revenue bonds payable from earnings of the plant do not constitute debt within a constitutional debt limitation. *Interstate Power Co. v. Town of McGregor et al. 296 NW 770.*

NOTE.—The cases above referred to, where decided by courts or regulatory commissions, will be published in full or abstracted in *Public Utilities Reports.*

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Public Utilities Reports

COMPRISING THE DECISIONS, ORDERS, AND RECOMMENDATIONS OF COURTS AND COMMISSIONS

VOLUME 37 PUR(NS) NUMBER 5

Points of Special Interest

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TITLES

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Re Bellows Falls Hydro-Electric Corporation et al.

[Opinion No. 60, Docket No. IT-5584.]

Water, § 35 — Navigability of river.

1. The Connecticut river from its mouth up to and beyond Bellows Falls, used for the transportation of persons or property in interstate commerce, was held to be a navigable water of the United States, p. 260.

Water, § 18 — License or permit for hydroelectric construction — Insufficiency of state permit.

2. The word "permit" in § 23(b) of the Federal Power Act includes nothing but a Federal permit, and a state permit for the construction of a hydroelectric project on a navigable water of the United States is not sufficient to validate the construction, maintenance, and operation of such a project without a Federal permit granted before June 10, 1920, or a license under the Federal Power Act, p. 261.

[March 4, 1941.]

INVESTIGATION *to determine status of hydroelectric project maintained and operated on a river; river held to be navigable waters of the United States and respondent required to apply for and obtain license under Federal Power Act.*

APPEARANCES: Claude R. Branch, Charles O. Pengra, and Thomas J. Davis, Jr., Boston, Massachusetts, and Walter S. Fenton, Rutland, Vermont, for the respondents; Howard E. Wahrenbrock and Willard W. Gatchell, for the Federal Power Commission.

By the COMMISSION: Upon consideration of the order of September 22, 1939, issued by this Commission, to investigate and determine the status of a hydroelectric project maintained and operated by the Bellows Falls Hydro-Electric Corporation (hereinafter referred to as respondent), and upon consideration of the respondent's answer thereto, the hearings held, and arguments submitted, the Commission finds as follows:

(1) The respondent is a Vermont corporation which was chartered in 1792 as "the company for rendering Connecticut river navigable by Bellows Falls." By the terms of the act of incorporation, Vermont granted to the respondent the exclusive privilege of constructing locks at Bellows Falls. At about the same time, the incorporators of the Vermont corporation were also incorporated under a substantially similar name in New Hampshire. (This corporation will hereinafter be

referred to as the New Hampshire Corporation.)

(2) The New Hampshire Corporation was granted by the state legislature the right to erect a dam on the Connecticut river and to divert water therefrom out of New Hampshire, through a small tract of land in Vermont, and back into the river in New Hampshire. (The various structures, as originally constructed and as subsequently reconstructed will hereinafter be referred to as the Project.) The act of incorporation provided that the Project should be so constructed as not to hinder the free passage of fish; that it should be kept in constant repair; and that the tolls to be charged should not exceed certain specified amounts.

(3) The respondent and the New Hampshire Corporation constructed the Project and operated it for purposes of navigation up to some time between 1857 and 1868, when its use for purposes of navigation was discontinued.

(4) As early as 1802, some water was taken from the canal for the purpose of developing power; and when the navigation use of the Project was discontinued, all the water diverted was used for developing power. Neither the diversion of the water for power purposes, nor the abandonment of the Project for purposes of navigation, was authorized by New Hampshire.

(5) From the time of its abandonment for navigation use until 1926, the Project was at various times reconstructed and used for the development, transmission, and utilization of power across, along, or in the Connecticut river. No act of Congress authorized the construction, nor was there approval of the construction plans by the Secretary of War or by the Chief of Engineers.

(6) In 1927, the Public Service Commission of New Hampshire authorized the respondent to reconstruct and raise the crest of the dam at Bellows Falls. The respondent and the New Hampshire Corporation then constructed its present hydroelectric project, consisting of a dam across the Connecticut river at a location close to that of the previous dam, a reservoir, and a large canal located in approximately the same position as the former canal, a power house, containing three 17,000-kilovolt ampere generators each driven by a water turbine rated at 20,000 horsepower on a 60-foot head, and appurtenant facilites. During the construction, various excavations and fills were made and a concrete diversion wall was erected in the bed of the Connecticut river, and transmission lines were constructed across the river. All these constructions were without any authority from Congress, or any other Federal authority, and particularly without a license under the Federal Water Power Act.

(7) These project works have been and are being maintained and operated by the respondent.

(8) The Connecticut river is an interstate stream, some 400 miles long, originating near the northern part of New Hampshire. After flowing for some distance in the state of New Hampshire, the river, at mile 360, flows southward as a boundary stream between the state of Vermont and New Hampshire for a distance of approximately 225 miles. At about mile

136, the river crosses the Vermont-Massachusetts state line, flows through the latter state, enters the state of Connecticut at mile 70, and then flows through Connecticut and empties into Long Island Sound, near the Saybrook Breakwater Light.[1] Bellows Falls is located at mile 174 on the river.

(9) Between miles 360 and 136, where the Connecticut river is an interstate boundary steam, both below and above Bellows Falls, several ferries have been operated, crossing the river at various places and used in the transportation of persons and property between the states of Vermont and New Hampshire.

(10) Prior and subsequent to any improvements, logs and rafts in large quantities were floated from the upper reaches of the Connecticut river as far down as Hartford. Logging and pulpwood floating were carried on as late as 1925. In 1784, 1785, 1800, and 1801, Vermont passed laws for the protection of floating timber, which confirms other evidence that this traffic was substantial and of commercial importance.

(11) Prior to any improvements on the Connecticut river, ocean going "yachts" and "barks," with capacities of 30 to 60 tons, navigated as far up as Hartford (mile 52) and Enfield Rapids (mile 68). In 1636, Springfield (mile 75) became an important trading post. Indians from the northernmost parts of the river went down the stream in canoes loaded with pelts and furs, which they carried to market at Northampton (mile 97), Springfield (mile 75), and Hartford (mile 52).

(12) In settling the territory along the Connecticut river, the white settlers ascended the river by canoes and boats of various descriptions, carrying their furniture and tools as far north as Bellows Falls and beyond. As the number of settlers increased, larger boats, carrying 9 to 12 tons were operated in greater numbers between the various falls on the river, the freight being unloaded, or partly unloaded, and transported on land around the falls. Flatboat navigation was effective as far north as Wells river (mile 266), which by the time of the Revolution was the head of boat navigation and was an important distributing point for freight until the advent of the railroads.

(13) The improvements on the Connecticut river began toward the end of the Eighteenth Century. Continuous navigation, without land carriage, was made possible through Enfield Rapids (mile 68), South Hadley Falls (mile 88), Millers Falls (mile 126), Bellows Falls (mile 174), Sumner Falls (mile 207), and White River Falls (mile 215). With these improvements, navigation on the river also increased.

(14) Between 1802 and 1857, boats in large numbers, carrying thousands of tons every year (between 2,000 and 10,000 tons, in round figures), passed through the respondent's canal, and the tolls received by the respondent and the New Hampshire Corporation were as much as $6,000 per year.

(15) Both prior and subsequent to the improvements, the Connecticut river, including the part thereof on which the respondent's project is located, has

[1] The mileages in these findings are the approximate distances along the river from the Saybrook Breakwater Light.

been used in the transportation of persons and property from one state to another and for transshipment and sale of such property in foreign commerce.

Opinion

This proceeding began on June 10, 1939, when the Bellows Falls Hydro-Electric Corporation (respondent herein), the Connecticut River Power Company, and the New England Power Company asked the Commission for a declaratory ruling that it had no jurisdiction of certain proposed mergers or consolidations of facilities. This request was denied. Soon afterwards, the New England Power Company filed an application under § 203 of the Federal Power Act, 16 USCA § 824b, seeking approval of the merger and consolidation of certain of its facilities with those of the respondent and the Connecticut River Power Company. The matter was set for hearing, but before the hearing was held, the New England Power Company, on September 1, 1939, withdrew its application and requested the Commission to vacate its order setting the matter for hearing. On September 22, 1939, the Commission issued an order consenting to the withdrawal of the application, but initiating an investigation, under § 4(g)[2] of the Federal Power Act, 16 USCA § 797, to determine the legal status of the respondent's project on the Connecticut river near Bellows Falls, Vermont.

[1] 1. This order of investigation was issued while the Commission was waiting for an authoritative determination of the navigability of New river in the case of United States v. Appalachian Electric Power Co. (1940) — US —, 85 L ed —, 36 PUR(NS) 129, 61 S Ct 291. Therefore, an extensive investigation was instituted into the questions whether the Connecticut river was navigable, or otherwise came within the regulatory jurisdiction of Congress under the commerce clause, and whether the Project itself affected interests of interstate commerce, both in respect of navigation and in other respects.

On the question of navigability, the evidence related to actual commercial navigation from colonial to recent times. Evidence was next developed on navigability from the standpoint of the *suitability* of the river for navigation, in terms of its physical characteristics, both in its natural and improved condition. Further evidence showed that the stream was otherwise within the regulatory jurisdiction of Congress under the commerce clause. Finally, the evidence established that the Project affected the navigable capacity of the Connecticut river at places where it was presently deemed definitely navigable and that the Project otherwise affected interstate commerce through the transmission of electric energy. Thirty-five witnesses were examined; the record made consists of 2,800 pages and 230 exhibits, varying in length

[2] "Section 4. The Commission is hereby authorized and empowered—

. . . . . .

"(g) Upon its own motion to order an investigation of any occupancy of, or evidenced intention to occupy, for the purpose of developing electric power, public lands, reservations, or streams or other bodies of water over which Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several states by any person, corporation, state, or municipality and to issue such order as it may find appropriate, expedient, and in the public interest to conserve and utilize the navgiation and water-power resources of the region."

from one to 800 pages, and voluminous briefs (totaling some 750 pages) were filed by counsel for both sides.

Since our findings lead to the conclusion that the Connecticut river, from its mouth up to and beyond Bellows Falls, has been used for the transportation of persons or property in interstate commerce, we do not deem it necessary to make any findings concerning the suitability of the stream for such use or concerning the other matters developed in the record, which are necessary only if the stream is not navigable water of the United States.

2. After the record in this proceeding was closed, the Supreme Court rendered its decision in the New River Case[3] in which the court held that the New river was navigable water of the United States. The opinion of the Supreme Court in that case establishes the legal criteria for determining whether a stream constitutes navigable water of the United States within the meaning of the Federal Power Act. Applying these criteria, it may well be said that there can be no doubt concerning the navigability of the Connecticut river up to and beyond Bellows Falls.

[2] 3. Having determined that the Connecticut river is navigable water of the United States, we find that the respondent's Project is being maintained and operated in violation of § 23 (b)[4] of the Federal Power Act, 16 USCA § 817.

The respondent disputes this proposition. It maintains that the Project is not unlawful under § 23(b), because, even if the river is navigable, the Project was constructed and is being maintained and operated under permits from the state of New Hampshire.[5] Had the Project been constructed, maintained, and operated "under and in accordance with the terms of" a permit granted by the state prior to June 10, 1920, the contention would still be without avail.[6] Even though a state has granted permission to the full extent of its authority, nevertheless a construction of the character here involved on navigable waters

[3] United States v. Appalachian Electric Power Co. (1940) — US —, 85 L ed —, 36 PUR(NS) 129, 61 S Ct 291.

[4] "Section 23(b). It shall be unlawful for any person, state, or municipality, for the purpose of developing electric power, to construct, operate, or maintain any dam, water conduit, reservoir, power house, or other works incidental thereto across, along, or in any of the navigable waters of the United States, or upon any part of the public lands or reservations of the United States (including the Territories), or utilize the surplus water or water power from any government dam, except under and in accordance with the terms of a permit or valid existing right of way granted prior to June 10, 1920, or a license granted pursuant to this act."

[5] The respondent also relies on alleged authorization from the state of Vermont, implied in various statutes. We see no such implications in the statutes referred to. Whatever may be the implications of the statutes, however, Vermont could not authorize the construction of a dam in New Hampshire.

[6] There is no factual foundation for the respondent's claim that it constructed, maintained, and operated this Project, under and in accordance with the terms of the New Hampshire Acts passed prior to June 10, 1920. The project was authorized for the purposes of navigation with requirements that it be kept in perpetual repair for such purposes. The respondent maintained it as authorized, until the second half of the Nineteenth Century, and it has not been operated as such a project for some eighty years. The argument that the project was constructed, maintained, or operated "under and in accordance with" the terms of those acts cannot be sustained. We have no occasion to go into the question whether the Project in its present state was constructed in accordance with the authority granted by the Public Service Commission of New Hampshire, because that authority was granted after June 10, 1920, subsequent to the enactment of the Federal Water Power Act.

of the United States requires a permit by competent Federal authority.[7]

Nor can it be said that by this provision Congress acquiesced in state permits which otherwise would have been insufficient in law. As applied to streams which are navigable waters of the United States, such a contention[8] would call for an interpretation of § 23(b) in derogation of the sovereign powers of the Federal government. Nothing short of express language would allow such an application of the statute.[9]

The language of § 23(b) is far removed from the possibility of interpreting the word "permit" to include anything but a Federal permit. The prohibition contained in this provision is directed not only against private persons, but also against states. If it be said that a state, by its very undertaking to construct, maintain, and operate a project, grants itself a permit, there is no meaning in the inclusion of the states within this provision. If a state may not construct, maintain, or operate a project in a navigable water of the United States without Federal authority, then certainly a private corporation may not do so. It must, therefore, be concluded that a state permit is not enough; that the statute makes the construction, maintenance, and operation of a project on a navigable water of the United States unlawful without a Federal permit granted before June 10, 1920, or a license under the Federal Power Act.

4. Counsel for the Commission urge that we issue an order requiring that an application for license be filed not only for the part of the Project owned by the respondent, but also for certain transmission lines owned by other corporations, which connect with the respondent's property, on the theory that the transmission lines are a part of the project. What should be considered as parts of the Project property and what should be the other terms and conditions of the license are proper subjects to be considered when an application for a license is filed. Until then, we have no occasion to pass on this question.

Conclusion

Upon the facts above found, and for the reasons stated in this opinion and in our Opinion No. 40, in Re Pennsylvania Water & Power Co. (1939) Docket No. IT-5524, 31 PUR (NS) 1, it must be concluded that the Connecticut river from its mouth up to and beyond Bellows Falls is navigable water of the United States and that the respondent should be required

[7] Pennsylvania v. Wheeling & B. Bridge Co. (1851) 13 How 518, 565, 14 L ed 249.

[8] A similar argument was made and disposed of in United States v. Rio Grande Dam & Irrig. Co. (1899) 174 US 690, 707, 43 L ed 1136, 19 S Ct 770. There it was contended that a construction was not in violation of § 10 of the Rivers and Harbors Act of 1890, 33 USCA §§ 401–403, because the provision operated only if the structures were not "affirmatively authorized by law," and the structure in question had been authorized by state law. The Supreme Court held that the phrase "affirmatively authorized by law" had reference to Federal law. This was held in respect of a structure located on a non-navigable part of the stream on the theory that the navigable capacity of the navigable part of the stream might be impaired. A fortiorari, this ruling would hold true in respect of structures on navigable waters of the United States.

[9] Statutes in derogation of sovereign right must be strictly construed. Reichelderfer v. Quinn (1932) 287 US 315, 321, 77 L ed 331, 53 S Ct 177, 83 ALR 1429; Charles River Bridge v. Warren Bridge (1837) 11 Pet. 420, 544, 9 L ed 773.

to apply for and obtain a license under the Federal Power Act.

An order will be entered accordingly.

SECURITIES AND EXCHANGE COMMISSION

Re Engineers Public Service Company et al.

[File No. 59-4, Release No. 2607.]

Intercorporate relations, § 19.5 — Holding company system — Single integrated system.

It was tentatively concluded that the single integrated system of a holding company system operating properties in various parts of the United States should be a system concentrated in the states of Virginia and North Carolina, or, alternatively, a system concentrated in the Gulf states, to the exclusion of properties in other parts of the country.

[March 11, 1941.]

PROCEEDING *under § 11 of the Holding Company Act, 15 USCA § 79k, for simplification of holding company system; tentative conclusions announced and hearing reconvened.*

By the COMMISSION: Engineers Public Service Company, a holding company of securities of certain companies engaged in the public utility business and in miscellaneous other businesses, registered on February 21, 1938, as a holding company under the Public Utility Holding Company Act of 1935. On February 28, 1940, the Commission issued a notice of and order for hearing pursuant to § 11 (b) (1) of said act, 15 USCA § 79k (b) (1),[1] in respect to Engineers Public Service Company and its subsidiary

[1] Section 11(b) (1) of the act provides:

"(b) It shall be the duty of the Commission, as soon as practicable after January 1, 1938:

"(1) To require by order, after notice and opportunity for hearing, that each registered holding company, and each subsidiary company thereof, shall take such action as the Commission shall find necessary to limit the operations of the holding company system of which such company is a part to a single integrated public utility system, and to such other businesses as are reasonably incidental, or economically necessary or appropriate to the operations of such integrated public utility system: *Provided, however,* that the Commission shall permit a registered holding company to continue to control one or more additional integrated public utility systems, if, after notice and opportunity for hearing, it finds that—

"(A) Each of such additional systems cannot be operated as an independent system without the loss of substantial economies which can be secured by the retention of control by such holding company of such system;

"(B) All of such additional systems are located in one state, or in adjoining states, or in a contiguous foreign country; and

"(C) The continued combination of such systems under the control of such holding company is not so large (considering the state of the art and the area or region affected) as to impair the advantages of localized management, efficient operation, or the effectiveness of regulation.

"The Commission may permit as reasonably incidental, or economically necessary or appropriate to the operations of one or more integrated public utility systems the retention of an interest in any business (other than the business of a public utility company as such)

companies, respondents, stating therein that it appears that the holding company system of Engineers Public Service Company is not confined in its operations to a single integrated public utility system[2] and to such other businesses as are reasonably incidental or economically necessary or appropriate to the operation of such integrated public utility system within the meaning of the act. On April 5, 1940, respondents filed an answer to said notice of and order for hearing.

On May 24, 1940, respondents filed a motion which in effect requested that they be furnished with a statement by the Commission of tentative conclusions as to the particular portions of the present system upon which the aforementioned statement in the notice of and order for hearing was predicated, and as to what action the Commission tentatively believes necessary to effect compliance with § 11 (b) (1) of the act, *supra,* so as to tender issues for hearing. On June 1, 1940, the Commission, in its opinion issued that date[3] undertook on the basis of its decision on a similar request by the United Gas Improvement Company in similar proceedings under § 11 (b) (1), involving the United Gas Improvement Company holding company system, to state such tentative conclusions.[4] Pending the preparation and issuance of such a statement by the Commission, the proceedings have been held in abeyance.

To aid it in arriving at its conclusions, the Commission directed its staff to prepare a report setting forth informative data with respect to the Engineers Public Service Company holding company system and suggesting the application of the pertinent provisions of the act.

Application of § 11 (b) (1) of the Act

As shown by the notice of and order for hearing previously issued in this

which the Commission shall find necessary or appropriate in the public interest or for the protection of investors or consumers and not detrimental to the proper functioning of such system or systems."

[2] An integrated public utility system is defined in § 2(a) (29) of the act, 15 USCA § 79b (a) (29), as follows:

"(29) 'Integrated public utility system' means

"(A) As applied to electric utility companies, a system consisting of one or more units of generating plants and/or transmission lines and/or distributing facilities, whose utility assets, whether owned by one or more electric utility companies, are physically interconnected or capable of physical interconnection and which under normal conditions may be economically operated as a single interconnected and coördinated system confined in its operations to a single area or region, in one or more states, not so large as to impair (considering the state of the art and the area or region affected) the advantages of localized management, efficient operation, and the effectiveness of regulation; and

"(B) As applied to gas utility companies, a system consisting of one or more gas utility companies which are so located and related that substantial economies may be effectuated by being operated as a single coördinated system confined in its operations to a single area or region, in one or more states, not so large as to impair (considering the state of the art and the area or region affected) the advantages of localized management, efficient operation, and the effectiveness of regulation: Provided, that gas utility companies deriving natural gas from a common source of supply may be deemed to be included in a single area or region."

[3] In Re Engineers Public Service Co. (1940) Holding Company Act Release No. 2084.

[4] In Re United Gas Improv. Co. (1940) Holding Company Act Release No. 2065, 33 PUR(NS) 285, 288. The Commission stated therein: "We consider the notice already given as adequate at this stage of the proceeding. Nevertheless, since the respondents have requested a recitation of the Commission's tentative conclusions, together with a full description of 'such action as the Commission has tentatively concluded to be necessary under the provisions of § 11(b) (1),' at the outset of the proceeding, and since no person could be injured by such statement, we are willing to enlarge our original notice."

proceeding, the public utility subsidiaries in the Engineers Public Service Company holding company system serve widely scattered sections of the country. Engineers' public utility subsidiaries are engaged principally in rendering electric service which is furnished in: Virginia and North Carolina by Virginia Electric and Power Company; Georgia by Savannah Electric and Power Company; Louisiana and Texas by Gulf States Utilities Company; Texas and New Mexico by El Paso Electric Company (Texas); Washington by Puget Sound Power & Light Company; Wyoming, South Dakota, Nebraska, Colorado, Kansas, Missouri, and Iowa by the Western Public Service Company and subsidiaries; and Florida by the Key West Electric Company. None of the electric utility properties of any public utility subsidiary is interconnected with those of any other such company.[5] Gas service is also rendered in Virginia, Louisiana, and Washington by the same subsidiaries rendering electric service in such states.

The subsidiary companies are, also, engaged in various nonutility businesses and have interests in other businesses.

The principal public utility properties in the holding company system from the standpoint of book value, revenues, and size and scope of operations are the electric utility properties of Virginia Electric and Power Company, Gulf States Utilities Company and Puget Sound Power & Light Company. However, no income has been received on Engineers' investment in Puget Sound Power & Light Company since 1930, the company is substantially in arrears on its preferred stock dividends, and it appears that condemnation proceedings have been instigated against certain portions of its public utility properties and negotiations have been pending for some time for the sale of the assets of the company to public authorities.

In light of the foregoing, we proceed to set forth our tentative conclusions as to the application of § 11 (b) (1) of the act, *supra*, to the Engineers Public Service Company and its subsidiary companies and properties owned and operated thereby on two alternative assumptions as to the public utility properties which may constitute the single integrated public utility system referred to in that section of the act.

The single integrated system.

The single integrated public utility system to which the operations of Engineers Public Service Company holding company system should be limited is composed of the units of electric generating plants, transmission lines, and distribution facilities owned and operated by Virginia Electric and Power Company.[6] This integrated public utility system (hereinafter sometimes referred to for convenience as "Virginia Electric System") serves an area of approximately 15,000 square miles which is approximately 140 by 210 miles in size, in the states of Virginia and North Carolina and has approximately 159,000 customers in the

[5] With the exception of such interconnection between the Western Public Service Company and its two subsidiaries, which for the present purpose may be treated as one company.

[6] The gas utility assets owned and operated by Virginia Electric and Power Company cannot be regarded as part of this system. In Re Columbia Gas & E. Corp. (1941) Holding Company Act Release No. 2477, 37 PUR (NS) 288, *post*.

area which has a population of approximately 793,000. The book value of such properties amounted to $64,664,000 as at December 31, 1939 and the gross revenues from the operation of such properties during 1939 amounted to $13,775,000. However, assuming that the interconnected electric utility properties of Gulf States Utilities Company constitute an integrated public utility system, such system (hereinafter sometimes referred to, for convenience, as "Gulf States Electric System") alternatively may be regarded as the single integrated public utility system within the meaning of § 11 (b) (1) of the act.

The application of the other provisions of § 11 (b) (1) of the act are discussed alternatively as to each of such possible single integrated systems.

"Virginia Electric System" as the Single Integrated System

Properties not retainable under Clause (B) of § 11 (b) (1).[7]

The application of Clause (B) of § 11 (b) (1) of the act precludes the retention, with the electric utility properties of Virginia Electric and Power Company, under the control of Engineers Public Service Company of the utility assets owned or operated by: Gulf States Utilities Company in the states of Louisiana and Texas; El Paso Electric Company (Texas) in the states of Texas and New Mexico; The Western Public Service Company and its subsidiaries in the states of Wyoming, South Dakota, Nebraska, Colorado, Kansas, Missouri, and Iowa; Puget Sound Power & Light Company in the state of Washington and the Key West Electric Company in the state of Florida.

Properties not retainable under Clauses (A) and (C) of § 11 (b) (1).

The Commission expresses no conclusion at this time as to whether electric utility assets owned and operated by Savannah Electric and Power Company constitute one or more integrated electric utility systems inasmuch as it appears unlikely that, irrespective of such status, the standards of Clauses (A) and (C) of § 11 (b) (1) of the act could be satisfied. Accordingly, the retention of such assets in the Engineers Public Service Company holding company system would be precluded.

The Commission expresses no conclusion at this time as to whether the gas utility assets owned and operated by Virginia Electric and Power Company constitute one or more integrated public utility systems or whether they are retainable under control of Engineers Public Service Company as one or more additional systems to the integrated electric utility system of Virginia Electric and Power Company.

Other businesses incidental to the "single" integrated system.

The Commission expresses no conclusion at this time as to whether the appliance or transportation businesses owned and operated by Virginia Elec-

[7] In accordance with our statement of tentative conclusions in Re United Gas Improv. Co. (1941) Holding Company Act Release No. 2500, 37 PUR(NS) 91, we tentatively conclude that Clause (B) of § 11(b) (1) means that a holding company may continue to control an integrated public utility system or systems additional to the "single" integrated public utility systems only if all such additional system or systems are located in the same state or states in which the "single" system is located, or in states adjoining thereto.

tric and Power Company are retainable in the holding company system as reasonably incidental, or economically necessary or appropriate to the operation of the single integrated public utility system of that company.

"Gulf States Electric System" as the Single Integrated System

Properties not retainable under Clause (B) of § 11 (b) (1).[8]

The application of Clause (B) of § 11 (b) (1) of the act precludes the retention, with the electric utility properties of Gulf States Utilities Company, under control of Engineers Public Service Company of the utility assets owned or operated by: Virginia Electric and Power Company in the states of Virginia and North Carolina; Savannah Electric and Power Company in the state of Georgia; the Key West Electric Company in the state of Florida; the Western Public Service Company and its subsidiaries in the states of Wyoming, South Dakota, Nebraska, Colorado, Kansas, Missouri, and Iowa; and Puget Sound Power & Light Company in the state of Washington.

Properties not retainable under Clauses (A) and (C) of § 11 (b) (1).

The Commission expresses no conclusion as to whether the electric utility assets owned or operated by El Paso Electric Company (Texas) constitute an integrated electric utility system inasmuch as it appears unlikely, that, irrespective of such status the standards of Clauses (A) and (C) of § 11 (b) (1) could be satisfied. Accordingly, the retention of such assets in the Engineers Public Service Company holding company system would be precluded.

The Commission expresses no conclusion at this time as to whether the gas utility assets owned and operated by Gulf States Utilities Company constitute one or more integrated public utility systems or whether they are retainable under control of Engineers Public Service Company as one or more additional systems to Gulf States Electric System.

Other businesses incidental to the single integrated system.

The Commission expresses no conclusion at this time as to whether the appliance, steam, ice, or water businesses owned or operated by Gulf States Utility Company, or whether the bus business owned and operated by Baton Rouge Bus Company, Inc., are reasonably incidental, or economically necessary or appropriate to the operation of Gulf States Electric System.

Interest in Other Businesses

It does not appear desirable at this time to determine whether securities held by Engineers Public Service Company and its subsidiaries of nonassociate enterprises are retainable in the holding company system, and the Commission will defer consideration of such matter until after the other issues raised by the proceedings have been determined.

Order Reconvening Hearing

It is hereby *ordered* that a hearing be held on March 25, 1941, at 10 o'clock in the forenoon of that day, in room 1102 of the Securities and Exchange Commission building, 1778 Pennsylvania avenue, N. W., Wash-

[8] See footnote 7.

ington, D. C., at which time the Commission will hear the respondents as to the issues present in this proceeding, and will consider the simplification of the issues, the facts and issues that appear to be without substantial basis of controversy, the order of presentation of evidence most conducive to an orderly proceeding, and such other matters as may aid in the disposition of the proceeding. At such time respondents shall show cause why the Commission should not forthwith issue an order requiring respondent, Engineers Public Service Company, to divest itself of its interest in all subsidiaries, except: Virginia Electric and Power Company and Savannah Electric and Power Company; or, Gulf States Utilities Company, El Paso Electric Company (Delaware), and Baton Rouge Bus Company, Inc.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Re Allegany Gas Company

[Application Docket No. 59779.]

Consolidation, merger, and sale, § 13 — Necessity of Commission approval — Nonutility property.

1. A certificate is not required as a condition precedent to the acquisition of property which has not been used or useful in the public service when the transfer does not involve a transfer of patrons, p. 270.

Consolidation, merger, and sale, § 13 — Necessity for Commission approval — Agreements between affiliates.

2. An agreement between affiliates for the sale of property does not require Commission approval if it involves a single transaction covering fixed assets in which the monetary value of the consideration does not exceed 1 per cent of the undepreciated book value of the fixed assets of the public utility, except that any such transaction involving more than $50,000 is not so exempt, p. 270.

[December 17, 1940.]

APPLICATION *for approval of acquisition and sale of pipe lines and rights of way; dismissed for lack of jurisdiction.*

By the COMMISSION: This application seeks Commission approval of Allegany Gas Company to sell and North Penn Gas Company to purchase certain pipe lines and certain rights of way in Potter and Tioga counties no longer useful to Allegany Gas Company but which will be essential to North Penn Gas Company in order for it to obtain natural gas for certain of its consumers and for the purpose of storing natural gas in natural reservoirs. The sale does not involve the transfer of any consumers and there are no protests.

Allegany Gas Company and North Penn Gas Company are Pennsylvania corporations engaged in producing and

distributing gas in the commonwealth. Allegany Gas Company is a wholly owned subsidiary of North Penn Gas Company.

North Penn Gas Company is furnishing gas to approximately 8800 consumers in Potter, Tioga, and McKean counties, and Allegany Gas Company is furnishing gas to approximately 1350 consumers in Tioga, Bradford, and McKean counties.

The property to be purchased comprises 1,720 feet of 4-inch, 1,720 feet of 6-inch, 218 feet of 5-3/16-inch and 1,139 feet of 4-inch pipe, located in Potter county, and connects the Andrews Settlement Station with North Penn Gas Company's 7-5/8-inch transmission line in Allegany township, and in Tioga county there are 17,898 feet of 8-5/8-inch line commencing at Cooley farm and extending northeastward to Lawrenceville, where it connects with North Penn Gas Company's 12-inch line. The other line to be purchased comprises 1,000 feet of 8-inch and 17,834 feet of 6-1/4-inch line commencing at the Palmer station and extends northward to North Penn Gas Company's 12-inch line in the village of Nelson. The Andrews and Palmer stations and certain pipe lines are to be purchased by North Penn Gas Company from New Penn Development Corporation, at A. 59780, 37 PUR(NS) post, at p. 270.

The purchase of the three lines in Potter county will enable North Penn Gas Company to compress gas delivered to it at the Andrews Settlement Station and deliver the same directly into its transmission system. At that station gas may be pumped in more than one direction and the purchase will permit a greater range in the conduct of the operation. The line from Nelson to the Palmer station, which is in the center of a storage area available to North Penn Gas Company, permits the delivery of gas for storage, and the pipe line from that station to Cooley farm that is to be acquired from New Penn Development Corporation at A. 59780, *supra* and the pipe line to be acquired in the instant application, extending from its connection on the Cooley farm with the above line to Lawrenceville, make it possible to store and discharge gas at the same time. At times of peak loads when no gas is being stored, both lines are available for discharge, which permits North Penn Gas Company to receive and discharge gas from this station into its main transmission system at Nelson or Lawrenceville.

As of midnight of August 31, 1940, North Penn Gas Company entered into an agreement with Allegany Gas Company to purchase the aforesaid pipe lines and rights of way at a price of $16,572.49. In support of the purchase price of $16,572.49, applicant submitted an estimate of the reproduction cost new at $56,210.31, with accrued depreciation of $9,321.67 and a depreciated reproduction cost of $46,888.64. The estimated original cost of the property is shown at $47,491.31, accrued depreciation at $7,926.67, and the depreciated cost at $39,564.64.

Notice of the application and public hearing was served on all the township supervisors and commissioners of Potter and Tioga counties and likewise appeared in three newspapers published in the said counties.

It appears that the applicant pro-

poses to make the necessary accounting entries in accordance with the requirements of the Uniform System of Accounts for Gas Utilities prescribed by the Pennsylvania Public Utility Commission effective January 1, 1939.

[1, 2] The prayer of the instant petition seeks to have us issue a certificate of public convenience under the provisions of Art. II, § 202(e) of the Public Utility Law, evidencing our approval of the acquisition by North Penn Gas Company of the aforesaid described property of Allegany Gas Company and also seeks, under § 702 of the same law, our approval of the agreement entered into between the two parties as of August 31, 1940. The property to be sold by Allegany Gas Company is no longer used and useful to it; however, this property will be useful to North Penn Gas Company and the transfer of the property does not involve a transfer of patrons. Likewise, the property to be acquired, while in the past used by Allegany Gas Company, will now for the first time be used by North Penn Gas Company. Careful consideration of these facts leads us to the conclusion that no certificate of public convenience under § 202(e) of the Public Utility Law is required.

Allegany Gas Company and North Penn Gas Company are affiliates, so that unless specifically exempted by the law the agreement between these two parties as of August 31, 1940, would require our approval. However, § 702 provides that agreements between affiliates do not require our approval if the agreement involves a single or isolated transaction covering the purchase or sale of fixed assets, materials or supplies used in rendering public service in which the monetary value of the consideration does not exceed 1 per cent of the undepreciated book value of the fixed assets of the public utility, except that any such transaction involving more than $50,000 shall not be so exempt. The undepreciated book value of the fixed assets of Allegany Gas Company is stated at upwards of $5,000,000 and of North Penn Gas Company at upwards of $12,000,000, both figures as of December 31, 1939. The instant consideration is $16,572.49 and from a consideration of these figures it does not appear that our approval of the said agreement is required.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Re North Penn Gas Company

[Application Docket No. 59780.]

Consolidation, merger, and sale, § 13 — Necessity for Commission authorization — Intercorporate agreement.

An agreement entered into between affiliates for the sale of property for a consideration in excess of $50,000 requires Commission approval, although the vendor is not a utility company and the property to be transferred has never been used in the public service.

[December 17, 1940.]

RE NORTH PENN GAS CO.

APPLICATION *for approval of agreement for property acquisition; approval granted.*

By the COMMISSION: The petitioner, North Penn Gas Company, a Pennsylvania corporation, seeks Commission approval to purchase certain real estate, compressor stations, and miscellaneous buildings and equipment, pipe lines, and other property in Potter and Tioga counties from New Penn Development Corporation, a Delaware corporation authorized to do business in Pennsylvania. New Penn Development Corporation sells no gas at retail and is engaged wholly in the production of natural gas and sale thereof at wholesale. No hearing has been held.

North Penn Gas Company and New Penn Development Corporation are affiliated companies. North Penn Gas Company distributes natural gas to 8,800 consumers in the counties of Tioga, Potter, and McKean. New Penn Development Corporation is not a public utility in the commonwealth and, therefore, no consumers are involved in the transfer of ownership of the property in this application.

As of midnight of August 31, 1940, the petitioner and New Penn Development Corporation entered into an agreement for the sale of the property mentioned in the petition for a consideration of $63,322.74 and, in support of that purchase price, submitted an estimate of the original cost at $177,736.83, accrued depreciation at $86,344.82, and depreciated original cost at $91,392.01. It likewise submitted an estimate of the cost of reproducing the property new at $194,033.65, accrued depreciation at $94,767.86, and depreciated reproduction cost at $99,265.79.

It appears that the petitioner proposes to make the necessary accounting entries in accordance with the requirements of the Uniform System of Accounts for Gas Utilities prescribed by the Pennsylvania Public Utility Commission effective January 1, 1939.

The property to be transferred consists of a tract of land situated in Allegany township, Potter county, on which is located the Andrews Settlement station, together with the auxiliary building, compressors, office building and meter house; a tract of land located in the township of Farmington, Tioga county, on which is located the Palmer station, together with the auxiliary building, compressing equipment, office and tool building, garage, and meter house. There is also included in this sale 15,671 feet of 8-5/8-inch pipe extending from the Palmer station to Cooley farm, where it connects with a pipe line mentioned in A. 59779, 37 PUR(NS) *ante*, p. 268; also 9250 feet of 8-5/8-inch pipe line extending from the Petticrew Well to the above-mentioned line, a structure at the Petticrew well and, likewise, the measuring equipment there, together with the rights of way on the line from Palmer station to the Cooley farm and also from the Petticrew well to Palmer station, as more fully set forth in the petition.

The purchase of the Palmer station and the Andrews Settlement station, together with the pipe lines in the in-

stant petition and other pipe lines mentioned in A. 59779, *supra,* will enable respondent to use the natural storage facilities in the vicinity of the Palmer station and enable it to deliver gas from that station to the company's main distribution line at Nelson and Lawrenceville. It will also enable the company to deliver the gas that it receives at Andrews Settlement station directly into its transmission main and thus, during periods of low demand, the company can store gas in the natural storage facilities located near Palmer station and, during periods of high demand, deliver gas directly into its transmission system, a condition that it is not now able to meet without the compressing equipment and pipe lines included in the sale at A. 59779, *supra* and the instant petition.

The prayer of the instant petition is that we issue a certificate of public convenience under Art. 11, § 202(e) of the Public Utility Law, evidencing our approval of the acquisition by North Penn Gas Company of the above described property and that, under § 702 of the same law, we grant our approval of the agreement entered into with New Penn Development Corporation. While the property to be transferred has in the past been used by New Penn Development Corporation, a nonutility, it will now for the first time be used by North Penn Gas Company, a utility, and under the provisions of § 202(e) *supra,* this acquisition by North Penn Gas Company does not require a certificate of public convenience.

However, North Penn Gas Company and New Penn Development Corporation are affiliates and the agreement entered into between them as of August 31, 1940, requires our approval under § 702 before it may become effective, since the consideration exceeds the $50,000 exemption noted therein.

It appears that the acquisition and use of the above-described facilities will increase the reliability of gas service furnished by North Penn Gas Company and that the agreement should be approved.

WISCONSIN PUBLIC SERVICE COMMISSION

City of Edgerton

v.

Wisconsin Power & Light Company

[2-U-599.]

Procedure, § 26 — Conduct of hearing — Participation by Commission staff.

1. Participation by the Commission's engineers and by Commission counsel in the preparation and introduction of evidence in a proceeding to determine the purchase price to be paid by a municipality for acquisition of property of an electric company is not objectionable as a participation of the Commission on behalf of one of the parties in interest, p. 275.

Evidence, § 26 — Presentation by Commission staff.

2. Facts revealed by an investigation of the Commission, through members of its staff, may properly be put in evidence in a proceeding before the Commission to determine the price to be paid by a municipality for acquisition of property of an electric company, p. 275.

Valuation, § 65 — Municipal acquisition — Reproduction cost.

3. The Commission, in arriving at the just compensation to be fixed for the acquisition of electric company property by a municipality, gives consideration to all elements or factors, tangible and intangible, which enter into and create the value of the property subject to acquisition, such as reproduction cost estimates, detailed engineering studies, and other evidence, p. 278.

Valuation, § 330 — Going value — Municipal acquisition of property.

4. The going value of an electric utility should be considered and allowed for in determining the just compensation to be fixed for acquisition of property by a municipality, p. 278.

Valuation, § 358 — Going value — Percentage allowance.

5. Going value should not be determined by a hard and fast percentage, p. 278.

Valuation, § 96 — Accrued depreciation — Ascertainment.

Discussion, in dissenting opinion, as to the ascertainment of accrued depreciation, p. 281.

Valuation, § 75 — Reproduction cost estimates.

Discussion, in dissenting opinion, as to discrepancies in estimates of reproduction cost introduced as evidence to determine compensation to be paid by a municipality acquiring utility property, p. 282.

Valuation, § 413 — Evidence — Material prices.

Discussion, in dissenting opinion, as to reproduction cost based on quotations of material prices, p. 282.

Valuation, § 100 — Accrued depreciation — Age-life method.

Discussion of the age-and-life method of determining accrued depreciation, p. 283.

Valuation, § 101 — Accrued depreciation — Inspection and observation.

Discussion of an estimate of accrued depreciation based upon inspection and observation, p. 284.

Valuation, § 20 — Measures of value — Reproduction cost.

Discussion, in dissenting opinion, as to reproduction cost new less depreciation as a measure of the value of physical utility property, p. 284.

Valuation, § 330 — Going value.

Discussion of the intangible element of going value, with a review of court decisions on this element, p. 285.

(NIXON, Commissioner, dissents.)

[February 1, 1941.]

WISCONSIN PUBLIC SERVICE COMMISSION

PROCEEDING *to determine compensation to be paid by municipality for acquisition of electric utility property; compensation fixed. For earlier decisions relating to this decision, see 231 Wis 390, 29 PUR(NS) 500, 522, 284 NW 586, 286 NW 392.*

Order on Remanding

By the COMMISSION: This matter was remanded to the Commission by a judgment of the circuit court of Dane county entered July 8, 1939, pursuant to the decision and mandate of the supreme court upon an appeal from the judgment of the circuit court which affirmed and approved a Commission order of March 30, 1936, 12 Wis PSCR 233, wherein the just compensation and the terms and conditions for the acquisition by the city of Edgerton of property of the Wisconsin Power and Light Company described in that order had been fixed by the Commission. Section 197.09, Statutes provides:

"If the compensation fixed by the order of the Commission be adjudged to be unlawful, the Commission shall forthwith proceed to set a rehearing for the redetermination of such compensation as in the first instance.

"The Commission shall forthwith otherwise alter and amend such order with or without a rehearing as it may deem necessary so that the same shall be reasonable and lawful in every particular."

The supreme court, 231 Wis 390, 29 PUR(NS) 500, 515, 284 NW 586, has determined that "For the reason that the just compensation was not fixed as of the time of the taking of the property, the order must be set aside." That means, as we interpret it, that we must redetermine the just compensation and in order to do so, a new appraisal of the property subject to acquisition in the city of Edgerton and vicinity became necessary. The utility and the city, having been notified of this necessity, the common council of Edgerton, by resolution of October 16, 1939, unanimously requested that we immediately proceed with that redetermination.

At the outset of this redetermination it became necessary that we first determine what is the property subject to acquisition. On April 19, 1940, after hearing, we determined:

"That the entity of property belonging to the Wisconsin Power and Light Company and subject to acquisition in this proceeding by the city of Edgerton, having been already fixed and determined by the previous order of this Commission, as approved upon judicial review thereof in an action brought to set aside such order, is that entity of property determined and described in the order heretofore made in this proceeding under date of March 30, 1936, *(supra)* which entity of property when acquired by the city will be inclusive of additions made thereto, including the tie line between the Sheepskin and Highway trailer substations, and exclusive of retirements therefrom up to the time of payment of the just compensation for the taking of such entity of property to be determined in this proceeding."

Thereafter, appraisals were made by our engineering staff and others upon an agreed inventory and at com-

pletion, hearings were held at Madison on August 21, 22, 23, and 24, 1940, and September 11, 1940, before Commissioners Robert A. Nixon and W. F. Whitney and Examiner W. A. Anderson.

APPEARANCES: City of Edgerton by Stanley Slagg, Attorney, Edgerton; Wisconsin Power and Light Company by Schubring, Ryan, Petersen & Sutherland by William Ryan, Attorney; of the Commission staff, H. T. Ferguson, Special Counsel.

Briefs were filed by the city of Edgerton and the Wisconsin Power and Light Company.

Opinion

[1, 2] On July 17, 1939, counsel for the utility informed the Commission that there had come to the company's attention the fact that the engineering staff of this Commission had under contemplation the making of an inventory and valuation of the public utility property at Edgerton for the purpose of presenting the same in evidence upon the further hearing in the Edgerton Case necessitated by the supreme court's decision, *supra*. The letter was written for the purpose "of advising the Commission at this time that we take the position that neither the Commission, nor its staff, should take any part in the preparation of evidence to be presented to the Commission, nor in the presentation of evidence to the Commission in the Edgerton Case; that the Commission should be and remain in position so that it can act and decide impartially between the city and the company"; further that the company takes "the position that it is not the province of the attorneys for the Commission to act, in fact, as attorneys for either party to the proceeding before the Commission, or present evidence or examine witnesses in connection with the presentation of evidence for and on behalf of either party."

The objection was repeated in later correspondence. On August 15, 1940, and before the hearing noticed for August 21, 1940, the Commission informed the parties that its staff "is prepared to introduce into evidence a valuation which it has made," and if it was still the intention of counsel for the company to offer objection, opportunity would be afforded at the outset of the August 21st hearing to argue on that objection.

On hearing utility counsel elaborated upon the objections of his letter. He contended that in the light of past experience and of the decision in Morgan v. United States (1936) 298 US 468, 80 L ed 1288, 56 S Ct 906; (1938) 304 US 1, 82 L ed 1129, 23 PUR(NS) 339, 58 S Ct 773, and the recent decision of the supreme court in the Edgerton Case above referred to (231 Wis 390, 29 PUR(NS) 500, 284 NW 586) the company did not obtain the public hearing accorded by the statutes. He maintained that it has been the practice of the municipality, party to the proceedings, to put in its evidence either directly or by a Commission engineer, to be followed by the testimony of the company. He alleged that he finds that nowhere do the statutes give authorization to a quasi judicial tribunal to seek out on its own initiative information in advance and then to have its own engineers or employees present that evidence or to take part in presenting it.

The objection to the participation of Commission's counsel in the hearing in matters of this nature is upon the same grounds that objection had been raised to the introduction by the staff of the appraisal which it has made; namely, that by his appearance, counsel becomes a party to the case.

Counsel's objection is not properly taken. The premise upon which he objects is erroneous; namely, that participation of the Commission's staff is participation in behalf of the municipality; or that participaton of Commission counsel in the introduction of the evidence by the Commission engineers is the participation of the Commission on behalf of one of the parties in interest.

Section 197.05 directs the Commission to determine ". . . just compensation to be paid for the property of such public utility, wheresoever situated, actually used and useful for the convenience of the public, and of all other terms and conditions of the purchase. . . ."

"The Commission shall, by order, fix and determine and certify to the municipal council, to the public utility and to any bondholder, mortgagee, . . . just compensation to be paid for the taking of the property of such public utility actually used and useful for the convenience of the public and all other terms and conditions of purchase which it shall ascertain to be reasonable."

Nowhere do the statutes undertake to direct the Commission in the manner of determination of the just compensation. (If the Commission deems it advisable to have its engineering department appraise the property as one of the measures by which it shall determine the just compensation, it surely may make use of its staff facilities for that purpose.) Furthermore, the statutes contemplate such use of the engineering staff, as witness § 196.855:

"Expenses incurred by the Commission in making any appraisal or investigation of public utility property under the provisions of Chap. 197 shall be charged directly to the municipality making the application."

By no stretch of imagination can the section above be construed to place the Commission engineering staff in the role of consultant for or in behalf of the acquiring municipality. Nor can it be said that the assistance of Commission counsel in the presentation of the staff's testimony or in the cross-examination of other witnesses in any way prejudices our determination. On the other hand, it is certainly of advantage to all concerned by assisting in the necessary discovery of facts and in the orderly presentation of matters to be considered.

Procedure in a matter of this nature differs from procedure in a condemnation matter under Chap. 32. Our function is analogous to but not identical with the function of the Commissioners appointed by a circuit court under Chap. 32. We are required to make an investigation of the facts pertaining to the value of the property for which just compensation must be awarded; so also are the Commissioners appointed under Chap. 32. Each of us is required to hold public hearings.

But from that point the functions of the two bodies are divergent by rea-

son of the different statutory methods for review of their determinations.

Under Chap. 32 the Commissioners make and file an award; appeal from that award by a dissatisfied party is direct to the circuit court. The inquiry before the court and the jury on such an appeal is exactly the same as that which was before the Commissioners appointed by the court.

On the other hand, we must make our determination upon the basis of evidence introduced in the proceeding before us. Consequently, when we make an investigation through our staff the facts compiled by the staff should be presented in evidence upon the hearing for the just compensation.

On an appeal of our determination, the reviewing court does not fix the just compensation anew as in the case of a proceeding under Chap. 32. The court's review of our order is merely the ascertainment of (1) whether the compensation fixed is unlawful or (2) whether the terms and conditions prescribed by such order are unreasonable. Thus the consideration of the reviewing court is directed to the evidence in the record of the proceedings before the Commission, unlike the situation presented in the proceeding under Chap. 32, wherein the evidence that may have been presented to the Commissioners appointed by the court is not competent to be presented on the trial of the appeal from the Commissioners' award.

(To contend, therefore, that we cannot put in evidence in the proceeding before us, the facts revealed by our own investigation is tantamount to a contention that we have no right to consider the results of such investigation.)

There has been submitted for our determination of just compensation a number of measures by which we may judge the amount, the reasonableness, or the propriety of that compensation. The utility whose property is being taken has offered by its consulting engineer and appraisal of the property to show cost of reproduction new and cost of reproduction new less depreciation. By another consulting engineer it offers another cost new less depreciation estimate, using the reproduction cost new of the first engineer. By its president it has submitted for consideration a theory of determining just compensation on the basis of the number of dollars invested per customer served. The Commission engineering staff also prepared and submitted estimates of cost of reproduction new and cost of reproduction new less depreciation. By these estimates we have before us from which to determine just compensation estimates of the value of the property subject to acquisition ranging from approximately $137,000 to $315,781.

The two principal appraisals submitted in evidence were those of our engineering staff and of Mr. J. Sam Hartt. Hartt's cost of reproduction new is $186,004 before the application of overheads. Comparable figure of the Commission's staff is $166,051, a difference of $19,953. Neither figure includes any amount for going value or materials and supplies. The difference of almost $20,000 in this reproduction cost new of the agreed inventory is about $14,000 in the cost of materials, and the balance in labor.

In all of its computations the staff has used as overheads an additional item of 10 per cent to cover engineer-

ing, supervisions, interest, and taxes, omissions, and other general overheads experienced during construction, while Hartt adds to his value of physical property overheads of 15 per cent.

The staff, in computing its cost of reproduction new, used material costs based on purchase records of the utility. Its labor performance units were derived by a study of the work orders of the same company. On the other hand, Hartt in computing his material costs, considered that anyone reproducing the property other than the Wisconsin Power and Light Company, would be obliged to pay more than that company for materials and that the amount such other person would be obliged to pay was the amount derived by application of quotations to much of the material. Hartt's computation of labor performance bases the performance on that of a number of other utilities supplemented by his judgment.

The estimates of condition per cent of both appraisals differ chiefly in respect to the meters and transformers. But the application of the varying condition per cents to the two estimates of cost of reproduction materially enhances the effect of the differences in the estimates of reproduction cost new. The staff's cost of reproduction less depreciation is $137,218; Hartt's $171,903, both including general overheads. A third cost of reproduction less depreciation estimate arrived at by Sloan and Cook (in which these engineers adopted Hartt's cost of reproduction figure), was even higher than Hartt's, amounting to $175,936.

In both the Hartt and Sloan and Cook valuations are included two Westinghouse remote control reclosing mechanisms mounting on the switchboard at the city substation at a reproduction cost new of $242 before general overheads. In our opinion these are not properly includible in the property to be acquired by the city of Edgerton.

[3, 4] In arriving at the just compensation to be fixed herein we have given consideration to all elements or factors, tangible and intangible, which enter into and create the value of the property subject to acquisition. We have also given careful consideration to all the testimony introduced, inclusive of the detailed engineering studies, the compensation suggested by the president of the company, and the evidence as to net additions to July 31, 1940 inclusive. Also as an intangible element entering into the value of said property based on a study of its general character, its growth, its development, the community served, and its status as a going established business, we have considered and made allowance for the going value of the utility.

[5] It has been urged that the Commission should set out a definite figure which it has allowed for "going value." In the Edgerton Case, 231 Wis 390, 29 PUR(NS) 500, 284 NW 586, the supreme court has definitely stated that it is not a requirement of the law that the Commission specifically designate the amounts allowed for the various items. Numerous citations from courts and Commissions throughout the United States have been submitted in this case to the effect that as high as 20 per cent of the appraised value of the tangibles has been used as a basis for determining the going value. We do not believe

that going value should be determined by a hard and fast percentage. We have not used such a percentage in order to reach our determination. However, if the going value of the Edgerton property considered by us were stated in a separate amount and were reduced mathematically to a percentage basis, the amount thereof would fall between 7 and 8 per cent of the physical property including overheads.

Upon careful consideration of all the evidence before us and after considering all the elements, including "going value," we have arrived at the conclusion that the value of the property to be acquired in this proceeding, as a complete entity of property, is $169,660. We further conclude that the just compensation to be paid the Wisconsin Power and Light Company by the city of Edgerton for the property which it is to acquire herein is the said sum of $169,660. To this sum must be added the value of the net additions to the property after July 1, 1940, until the date of the transfer of title, as well as the value of the materials and supplies to be taken.

The just compensation herein determined includes an amount still to be ascertained for the value of materials and supplies, as well as the allowance of another unascertained amount for the value of net additions or net retirements to or from the property subject to acquisition. In accordance with the order herein made, such amounts will be ascertained at or about the time when the just compensation herein fixed and determined shall be paid. The order will provide that the city and the company may agree, if they can and will, upon such amounts; but that failing such agreement the amounts will be ascertained by this Commission.

In order that dispute or litigation over the determination of the value of such materials and supplies or of such additions or retirements shall not unduly postpone the transfer of title of the property to the city, the order herein will provide for the payment of lump sums, on account of the amounts of the values thus to be ascertained, in addition to the amount of $169,660, herein found as the value of the property subject to acquisition exclusive of such materials and supplies. From the evidence before us it does not appear that the amount of materials and supplies on hand at the time of such transfer of title will be in excess of $1,000; nor that the amount of net additions to the property during the interim, between July 31, 1940 and the date of such transfer of title, will exceed $4,000.

Consequently the order herein made will provide that in case the city and the company are unable to agree upon the value of materials and supplies on hand at the time of payment of such just compensation, then the city may pay the sum of $1,000 into the circuit court for Rock county for the use and benefit of the person or persons entitled thereto, as a guaranty of the payment of the value of such materials and supplies as finally ascertained; and may also pay into the circuit court for Rock county for the benefit of the person or persons entitled thereto the amount of $4,000 as a guaranty of a payment of the amount, as finally ascertained, of the value of such net additions to said property; and that upon evidence being presented to the Commission that said sum of $169,660,

together with the additional sums of $1,000 and $4,000 as above specified, has been paid into the circuit court as aforesaid, the certificate of this Commission of the just compensation and terms and conditions herein fixed and determined will be issued to the city of Edgerton.

The supreme court has set aside the earlier order for the reason that the just compensation was not fixed as of the time of taking of the property, but has approved the proceeding in all other respects. For the sake of convenience, however, we repeat those findings of the order of March 30, 1936, 12 Wis PSCR 233, for which changes are unnecessary.

Findings

The Commission *finds:*

1. That the city of Edgerton is a duly incorporated city of this state, located in Rock county; and the Wisconsin Power and Light Company is a public utility corporation of this state operating as a separate public utility in said city of Edgerton under and pursuant to an indeterminate permit arising or resulting from a franchise granted by the city on the 9th day of October, 1906, to the predecessor in interest of said Wisconsin Power and Light Company, and duly surrendered for an indeterminate permit on the 13th day of July, 1909.

2. That upon due notice and due proceedings therefor first duly given and had, the said city of Edgerton duly determined by a vote of its electorate held on the 27th day of June 1933, to acquire, pursuant to the right of the city under the indeterminate permit hereinbefore referred to, all of the property actually used and useful for the convenience of the public and belonging or pertaining to said Wisconsin Power and Light Company as such separate utility operating under said indeterminate permit, as aforesaid.

3. That the property actually used and useful for the convenience of the public, and belonging or pertaining to said Wisconsin Power and Light Company, operating as such separate public utility under said indeterminate permit, as aforesaid, excepting materials and supplies as hereinafter referred to, is described as follows:

(a) All of the electrical distribution, transformation and transmission property of the Wisconsin Power and Light Company located within the boundary limits of the city of Edgerton; including therein the so-called city and Highway Trailer substations, but excluding therefrom the wires and insulators forming part of the so-called Indian Ford-Cambridge transmission-line circuit within the said city limits.

(b) All of the electrical distribution system property of the Wisconsin Power and Light Company constituting extensions of the city distribution-system property listed in Exhibits 6 and 8 in this proceeding, situated and being used for the service of customers within the towns of Fulton and Milton in Rock county, and within the town of Albion, Dane county, Wisconsin.

(c) The electrical transmission property of said Wisconsin Power and Light Company situated outside the city boundary of said city of Edgerton and constituting the so-called 6,900-volt and 11,000-volt tie lines connecting the company's distribution-system property within said city with the so-

called Sheepskin substation, situated west of said city, together with all distribution lines or property carried on or connected with the poles constituting part of such transmission property.

Meaning by, and including in, all transmission and distribution-system property described in paragraphs (a), (b), and (c), above set forth, all poles, anchors, guys, crossarms, insulators, wires, services, transformers, meters, and associated equipment. belonging or pertaining thereto or connected therewith.

(d) The following described parcels of land situated in said city of Edgerton, to wit: [Description omitted].

4. That the foregoing described property, together with the materials and supplies hereinafter referred to, constitute all the property belonging or pertaining to said Wisconsin Power and Light Company as a separate public utility operating under said indeterminate permit.

5. That the fair and reasonable value, as of the date of this order, of all of the above described property, as the same was upon July 31, 1940, including the going value of the utility and all other proper allowances, is the sum of $169,660; and that the just compensation herein fixed and determined for the taking of the property subject to acquisition in this proceeding is said sum of $169,660, together with the value, to be ascertained as herein prescribed, of materials and supplies on hand at the time of payment of such compensation; and less or plus the value, to be ascertained as herein prescribed, of net retirements from or of net additions to said described property subsequent to July 31, 1940, up to the time of such payment.

6. That the property subject to acquisition by the city of Edgerton, as hereinbefore described, is subject to the lien of a mortgage or of a trust deed in the nature of a mortgage given by the Wisconsin Power and Light Company to secure the payment of the company's indebtedness as evidenced by outstanding bonds.

NIXON, Commissioner, dissenting: I cannot concur in the amount of compensation fixed by this order. It is too high; and I am unable to perceive how it can be justified in view of all the evidence.

That evidence consists for the most part of conflicting estimates by the company's and the Commission's engineers of what it would cost to reproduce the Edgerton property new, and of the extent to which depreciation has accrued to that property. Singularly enough (the reverse is usually the case) the sharpest conflict between these estimates is with respect to reproduction cost new.

Any estimate of accrued depreciation must be based largely on the judgment of the engineering expert who makes it; and its accuracy depends to a very great extent upon his experience, knowledge, disinterest, and honesty. The same is not true of an estimate of reproduction cost new. It consists to a far greater degree of mere computations of figures derived from known or readily ascertainable facts. Thus the accuracy of such an estimate may be tested by nonexperts and its reliability may be ascertained by a careful study of the factual data upon which it purports to be based.

Here the discrepancy between the two estimates of reproduction cost new is so great that it cannot be explained by any mere difference of judgment between the experts who made them. The estimate of Mr. Hartt, the company's engineer, is $213,904, including overheads; while the corresponding estimate of Mr. Rust, the Commission's engineer, is $182,657, a difference of more than $31,000; the one being more than 17 per cent higher than the other. Since one or the other of such estimates must be wrong and unreliable, it becomes necessary to examine the supporting data and the methods used by the engineers in arriving at their estimates.

A careful study of the evidence reveals that Mr. Rust's estimates of the material costs, labor performance, and labor and general overheads—the items comprising the computations of both engineers to arrive at the figures for reproduction cost new—is supported not only by extensive data in the files of the Commission accumulated over a long period of years but by actual records of prices paid, work orders, and overhead charges of the company itself.[1] These data were available or known to Mr. Hartt but ignored by him, except to arbitrarily increase the costs shown thereby in accordance with quotations of material prices obtained by him or with the experience of other utility companies with respect to labor performance and overheads, or because of the supposed superior purchasing power of the company. A reliable estimate of reproduction cost new of utility property cannot be made by such methods. This case is barren of any evidence tending to show that the purchasing power or operating efficiency of this company is superior to that of a contractor who might be employed to reproduce the Edgerton property. In fact, there is uncontradicted evidence in the record showing just the contrary. It is common knowledge, also, that quotations of material prices by manufacturers or dealers, if made without relation to any intended purchase, being noncompetitive do not reflect actual purchase price possibilities and are unreliable as compared with prices paid for actual purchases.

In my opinion the evidence in this case clearly establishes that Mr. Rust's estimates of reproduction cost new are ample and that the corresponding estimate of Mr. Hartt is altogether too high. I come to this conclusion wholly apart from any consideration of possible bias which may have actuated Mr. Hartt as a result of his knowledge of the desire of his employer to prevent, if possible, the acquisition of its property in this proceeding. Making all due allowance for possible errors, omissions, or mistakes of judgment by Mr. Rust, I am unable to see how it can reasonably be determined from all of the evidence in this case that it would cost more than $185,000 to reproduce the Edgerton property new.[2]

[1] In arriving at his estimate of overhead charges, Rust used the experience of the company to which he added an allowance for omissions and interest resulting in a figure of 10 per cent; whereas Hartt used his judgment figure of 15 per cent for the same item. This accounts for a substantial part of the difference in the two estimates of cost of reproduction new.

[2] If the property were to be constructed on a "wholesale" basis instead of "piecemeal," the cost would probably be substantially under Rust's estimate of $182,000. Witness Kelly, a contractor engaged in "wholesale" construction of distribution lines, testified that his material and labor costs were substantially less than either Rust or Hartt estimated.

The estimates of the two engineers of the over-all amount of depreciation which has accrued to the Edgerton property are different. Mr. Hartt's over-all condition per cent is slightly over 80; Mr. Rust's is 75 plus.[3] This might be accounted for in part by honest differences which could occur in such estimates made by equally capable and experienced engineers.

However, this difference between the estimates of the two engineers is more logically accounted for by the different methods which they pursued in arriving at their respective estimates. Stated somewhat too briefly for strict accuracy, the one used the so-called inspection method and the other used, in greater or less degree, the so-called age-and-life method coupled with an inspection of the property.

The age-and-life method of determining accrued depreciation consists of the use of three factors: (1) the actual time that a given item of property has been in service, called the "elapsed life," (2) the estimated length of time that items of property such as the one in question usually, or upon an average, remain in service, called "the average life,"[4] and (3) the estimated time that the item in question will remain in service, called "the remaining expectancy" or "the remaining life." In certain earlier cases the "remaining life" was estimated from data as to the "elapsed life" by means of mortality experience tables based upon the data from which the "average life" was estimated, and thereby to estimate accrued depreciation solely from data which was obtained without even looking at the property involved. Estimates of depreciation arrived at in this way have not met with judicial approval. Wisconsin Teleph. Co. v. Public Service Commission (1939) 232 Wis 274, 30 PUR(NS) 65, 287 NW 122.

But this was not the method which Mr. Rust used with respect to any of the property which could be inspected or the inspection of which would afford any useful information. All such property was thoroughly inspected by Mr. Rust. He did not inspect meters and transformers but neither did Mr. Hartt, because inspection of such property was either practically impossible or not worth making.

When the condition of each of the various items of property was observed by Mr. Rust (with exceptions as above noted) he used the information thus obtained to make an estimate of the "remaining life" of such item, and then by relating that "remaining life" to the "average life" of that item, arrived at the per cent condition to reflect its accrued depreciation.

It is unnecessary to set forth in detail the precise steps in such calculation. Suffice to say that the method employed gives proper weight to all facts that either inspection or observation may reveal and also gives consideration to elements and factors causing depreciation which neither inspection nor observation can reveal. For as age takes its toll of human life it exacts its toll of utility property and old utility property is not as good as

[3] Hartt's estimate of cost of reproduction new less accrued depreciation is $171,903; Rust's corresponding estimate is $137,218, a difference of $34,685.

[4] Average life is determined from studies of the length of time many items of the same class have remained in service. This is used by all utilities in estimating annual depreciation.

new utility property even though the human eye may not be able to discern the effect of age upon it.

The method employed by Mr. Hartt was based on what facts inspection and observation revealed to him through the eyes of his employees. Although he may make allowances for obsolescence and inadequacy, both elements entering into depreciation, he avowedly gives no consideration to "elapsed life" or "average life" as factors or causes relating to depreciation nor does he consider casualties not covered by insurance and public requirements which are likewise proper elements of depreciation. Thus he actually found only the physical deterioration which had already taken place. This is not depreciation—it is only one of the elements of depreciation. Estimates based on consideration of "remaining life" without considering "average life" amount to mere guesses.

As a matter of fact, the only standard we have by which to test the accuracy of Mr. Hartt's estimate of accrued depreciation and the weight, if any, given by him to the various elements which make up depreciation is no more and no less than Mr. Hartt himself. On the other hand, with respect to Mr. Rust's estimates we have as criteria the detailed facts as to "elapsed lives" and his estimates of "average" and "remaining" lives based on studies of the experience of many utilities over the years. From that we are able to make at least an approximately correct judgment of the accuracy of his estimates of depreciation.

In estimating the weight to be given the opinions and estimates of engineering experts, we may rightfully take into account our experience with other experts in the same field. In that connection it is worth noting that valuation engineers employed by other utilities come before us with estimates of accrued depreciation which are arrived at by the identical methods employed by our engineering staff, including Mr. Rust. Some of those experts have had as wide and varied experience as Mr. Hartt, and it has happened, at least in one instance, that their estimates of the amount of accrued depreciation were greater than those arrived at by the staff.

In any event, there is nothing in this record except the expressed judgment of Mr. Hartt to impeach Mr. Rust's estimates of accrued depreciation. In fact these estimates may well be too high since in arriving at the present condition of the property Mr. Rust applied a sinking-fund calculation which results in a lower estimate of accrued depreciation than would have resulted if the sinking-fund calculation had not been applied. The logic of applying such calculation to the determination of accrued depreciation as distinguished from annual charges to a depreciation reserve account is open to question.

Of course, reproduction cost new less depreciation is neither the equivalent nor the measure of the value of physical utility property. It is merely a guide in the determination of that value. Chicago & N. W. R. Co. v. State (1906) 128 Wis 553, 108 NW 557; Appleton Water Works Co. v. Railroad Commission (1913) 154 Wis 121, 142 NW 476, 47 LRA(NS) 770, Ann Cas 1915B 1160. But its validity as a guide results from the fact that it indicates an amount which

a willing purchaser would pay for utility property, rather than to reproduce it for himself. Therefore, if an estimate of such reproduction cost new is accurate, it represents all that such physical property can possibly be worth. Accordingly a proper estimate of reproduction cost new less accrued depreciation indicates the highest allowance that should be made for the value of the physical property in the determination of the just compensation which we are required to fix. Any additional allowances must be for intangible elements.

The only intangible element under consideration is what is termed "going value." As was said by the supreme court of Iowa, the "going value" of a utility is something that "attaches to the business (of the utility) rather than to the property employed in such business." Cedar Rapids Water Co. v. Cedar Rapids (1902) 118 Iowa 234, 91 NW 1081.

It has also been held, and rightly so, that when physical utility property has been appraised upon the basis of its reproduction cost new less depreciation as a part of an assembled whole, all proper consideration has been given to any going value which may be claimed for that physical property. Columbus Gas & Fuel Co. v. Ohio Pub. Utilities Commission (1934) 292 US 398, 78 L ed 1327, 4 PUR(NS) 152, 54 S Ct 763, 91 ALR 1403; Des Moines Gas Co. v. Des Moines, 238 US 153, 59 L ed 1244, PUR1915D 577, 35 S Ct 811. No one will maintain that a utility's physical property would have a value which even approaches its present reproduction cost, less depreciation, if that property were dissociated from all opportunity to use it in the conduct of a business.

The going value of a utility is not the same thing as the good will which the utility may enjoy. Appleton Water Works Co. v. Railroad Commission, *supra*. Los Angeles Gas & E. Corp. v. California R. Commission, 289 US 287, 77 L ed 1180, 1197, PUR1933C 229, 53 S Ct 637 and cases cited.[5] Further, we may not include any allowance for the value of the indeterminate permit, that is, the exclusive privilege under which the utility operates and which the acquisition of its property terminates. Appleton Water Works Co. v. Railroad Commission, *supra*. Since we must not allow anything for the value of the utility's permit, we cannot allow anything as an element of the value of the utility's property which arises solely out of the fact that it operates free from competition. Stated in another way, the query is: what would the going value be if this property were operated as a business enterprise subject to competition?

I have no doubt that the business conducted by the company at Edgerton has considerable value. But if there is subtracted from that value all elements which result from the good will which the company may enjoy, and also all elements of value which result from the fact that the business is operated free of actual or potential competition, the remaining value cannot be very considerable. The "going value of the utility" cannot be more than that remaining value, whatever it may be.

[5] But it would seem that every cogent reason supporting the exclusion of good will as an element of value applies with equal force to going value.

Mr. Hartt's estimate of $21,000 for going value to be added to his estimate of reproduction cost new is not supported by any evidence of probative force. It is merely a matter of his judgment (Tr. 275) supported by no computations (Tr. 276). He based his so-called estimate on the fact that it is a going concern which has been through the stages of development, and development expenses have been borne in the past; and the customer saturation and use of energy is above the average for the company as a whole (Tr. 273, 275). He also considered that whoever takes over the property will be relieved of certain expenses for promotion of the business and advertising (Tr. 275).

Mr. Chief Justice Hughes demolished such so-called estimates of going value when he said: "It does not give license to mere speculation; it calls for consideration of the history and circumstances of the particular enterprise . . . ." Los Angeles Gas & E. Corp. v. California R. Commission, *supra,* at p. 246 of PUR1933C. The record in this case is barren of any evidence showing that Mr. Hartt gave any consideration to the history of this company in arriving at his allowance for going value.

Again, Mr. Justice Cardozo speaking for the court on the subject of development expense and cost of adding customers as elements of going value, said: "So far as value had been added above the moneys thus expended, there was not even approximate precision in measuring its amount. The burden of building up patronage may be negligible where there is little competition with any other producer or with other kinds of fuel. Charleston v. Public Service Commission, 110 W Va 245, PUR1931E 74, 159 SE 38." Columbus Gas & Fuel Co. v. Ohio Pub. Utilities Commission, *supra,* at p. 162 of 4 PUR (NS).

Throughout the history of this enterprise it has been operated free of competition, and there is no evidence whatever bearing on the cost of adding customers or developing the enterprise other than what has been included in the estimates of reproduction cost new. Moreover, it is probable that most, if not all, of such expenses have been charged to operations and the utility has thereby been fully reimbursed. To include such expenses which have been charged to operations as a part of the value of the property is to reimburse the utility twice for the same expenditure. With equal logic other items of operating expense, such as maintenance and taxes, might be included as a part of going value.

Justices Cardozo continues, "Other experts, testifying to an aggregate, without assigning a proportion to the contributory factors, give estimates so vague as to be little more than guesses, one of them, for illustration, holding to the opinion that ten would be a fair percentage, yet unable to give a reason why the amount should not be less or greater.

"From the testimony as a whole one gains a definite impression that the opinions are derived for the most part from a professed experience and understanding of business conditions generally, and very little from any knowledge of the 'history and circumstances of the particular enterprise.' Los Angeles Gas & E. Corp. v. California R. Commission, 289 US 287,

77 L ed 1180, PUR1933C 229, 53 S Ct 637; cf. Houston v. Southwestern Bell Teleph. Co. 259 US 318, 325, 66 L ed 961, 965, PUR1922D 793, 42 S Ct 486.

"We cannot find that the Commission and the court went beyond the bounds of a legitimate discretion in putting aside these estimates as too uncertain to be followed." Columbus Gas & Fuel Co. v. Ohio Pub. Utilities Commission, *supra*, at pp. 162, 163 of 4 PUR(NS).

Certainly the estimates of going value in this case, "so vague as to be little more than guesses," amounting to 9.85 per cent of reproduction cost new of the property, should be put aside as "too uncertain to be followed."

It has been said that there is a further element of going value which is represented by the business of the enterprise as distinguished from the physical property and that, therefore, some additional allowance should be made after considering the evidence bearing on the growth of the business, customer saturation and use, and the growth and development of the locality in which the property is located. It is said that these factors shed light on the value of the business and warrant a further allowance. This contention presents difficulties.

In the first place, there is no provision in the public utility law from which it can be argued that the municipality must take over or pay for the business of the enterprise in addition to the property. On the contrary, the statute refers to the "property" and "plant" interchangeably. (Sections 197.01, 197.02, 197.03, and 197.05.) Thus, when the element of going value which is inherent in the property has been allowed for, there is no authority for making any additional allowance for the business of the utility which is distinguishable from the plant as an assembled whole.

But if it is assumed that the municipality must acquire and pay for some element of going value which inheres in the business of the utility as distinguished from the element of going value inherent in the property, the difficulties are even more numerous. It must be clear that the value of the business at Edgerton is measurable by its profitableness to the company for if it is a losing enterprise there can be little value to it. The amount of profit depends on many factors, including the efficiency of the management, good will, the exclusive privilege of doing business, economic conditions in the locality and, indirectly, economic conditions in the country as a whole, the taxing policies of public authorities, and the regulatory policies of the state, as well as many other factors. The courts have said that some of these factors are not properly includible as elements of going value, and since none of them have been separately evaluated it is not possible to even guess at the value of the others.

For the reasons stated, the appraisal of the physical property as part of an assembled whole includes all proper elements of going value. In my judgment, the sum of $136,000, plus the cost of net additions since the date of the inventory, represents the highest amount of just compensation which can be supported in this case, giving due weight to all of the evidence bearing on value. The just compensation might well be substantially below this

amount in view of the evidence indicating that material and labor costs on a wholesale reconstruction basis are substantially less than the amount allowed for such items in the estimates of Hartt and Rust.

SECURITIES AND EXCHANGE COMMISSION

Re Columbia Gas & Electric Corporation

[File No. 54-12, Release No. 2477.]

Intercorporate relations, § 19.8 — Holding company system — Integration and simplification — Advisory opinion.

1. The policy of rendering all appropriate assistance to a holding company system desiring to comply voluntarily with the integration and simplification provisions of the Holding Company Act by rendering an over-all advisory opinion should be pursued whenever the occasion permits, but such an opinion under § 11 (e), 15 USCA § 79k (e), must be given with great care and caution, and a finding on an incomplete or uncertain state of facts would be unfair to the successful administration of the act, to the future investing public, and to the applicant itself, p. 303.

Intercorporate relations, § 19.3 — Holding company system — Single integrated system — Gas and electric utilities.

2. Electric and gas utilities of a holding company system together do not constitute a "single integrated public utility system" under the provisions of the Holding Company Act, p. 303.

Intercorporate relations, § 19.3 — Holding company systems — Electric and gas properties — Separate integrated system.

3. Electric properties and gas properties of a holding company system, which do not constitute one integrated system, may be retained as separate integrated systems only where they conform to the standards of (A), (B), and (C) of § 11(b) (1) of the Holding Company Act, 15 USCA § 79k (b) (1), dealing with additional systems, p. 303.

Intercorporate relations, § 19.7 — Holding company systems — Corporate structure.

4. Subsidiary companies in a holding company system which engage in no business and own no property serve no useful purpose, and their continued existence may well be considered, on any functional basis, to complicate unduly and unnecessarily the structure of the holding company system, within the meaning of § 11(b) (2) of the Holding Company Act, 15 USCA § 79k (b) (2), p. 307.

Corporations, § 15 — Dissolution — Necessity of Commission approval.

5. A holding company is free under the Holding Company Act, without the permission or approval of the Securities and Exchange Commission, to dissolve subsidiary companies which have no useful purpose and the continued existence of which would complicate unduly and unnecessarily the structure of the holding company system, p. 307.

Intercorporate relations, § 19.8 — Holding company systems — Corporate simplification — Approval of corporate dissolution.

6. It is unnecessary for the Commission to approve the dissolution of unnecessary subsidiary companies in a holding company system for the purpose of simplification of the corporate structure under § 11(b) (2) of the Holding Company Act when the applicant for Commission action under § 11(e) is free under the act to dissolve the companies at its will without permission or approval, p. 307.

Consolidation, merger, and sale, § 24.1 — Elimination of holding company.

7. The transfer of wholly owned subsidiary companies by a subsidiary holding company to its parent corporation so as to eliminate the intermediate company, when the parent company is itself a subsidiary of a registered holding company, should be approved as part of a proposed plan for simplification presented under § 11(e) of the Holding Company Act as consonant with the objectives of § 11(b) (2), p. 307.

Intercorporate relations, § 19.8 — Holding company system — Simplification — Approval of partial steps.

8. To the extent that a plan submitted under § 11(e) of the Holding Company Act proposes steps, even of a minor nature, which at sometime or another will be necessary or appropriate to effectuate in full the provisions of § 11 (b) (2), it does not merit disapproval of the Commission although this part of the program does not appear very substantial, p. 307.

Intercorporate relations, § 19.8 — Holding company system — Simplification — Findings as to fairness of plan.

9. It is unnecessary for the Commission to make any findings concerning the fairness of a plan for corporate simplification under § 11(b) (2) of the Holding Company Act, submitted pursuant to § 11(e), when the applicant is the only person affected by the plan because of the absence of public security holdings, p. 307.

Corporations, § 18 — Voting power — Holding companies.

10. To satisfy the requirements of § 11(b) (2) of the Holding Company Act it is not sufficient to give preferred stockholders a vote, but the vote, to be effective, must be such as will afford them recognition in the corporation in an amount substantially corresponding to the proportion of their investment in the corporation, and this is particularly true where preferred stock is a junior security, p. 309.

[January 10, 1941.]

APPLICATION *pursuant to § 11(e) of the Holding Company Act for approval of a plan of simplification; opinions expressed as to certain features of plan and plan disapproved. Petition for rehearing denied February 28, 1941.*

APPEARANCES: Arnold Levy and John W. Houser, of the Public Utilities Division of the Commission; Cravath, deGersdorff, Swaine & Wood, by Edward S. Pinney, A. I. Henderson, and William Wemple, for the Columbia Gas & Electric Corporation; Robert H. Jackson, Thurman Arnold, Wendell Berge, Milton Katz, Morris R. Clark, John S. L. Yost, and Thomas J. Lynch for the Attorney General of the United States; Thomas

J. Herbert, for the state of Ohio; Kenneth L. Sater, for the Public Utilities Commission of Ohio; John D. Ellis, for the city of Cincinnati, Ohio; Martin S. Dodd, for the city of Toledo, Ohio; Richard B. Hand, for the Van Horn Protective Committee of Inland Gas Corporation Bondholders; Marshall, Melhorn, Davies, Wall & Bloch, for the Interlake Iron Corporation.

By the COMMISSION: Columbia Gas & Electric Corporation (hereinafter referred to as "Columbia" or "applicant"), a registered holding company, has filed an application pursuant to § 11 (e) of the Public Utility Holding Company Act of 1935, 15 USCA § 79K (e),[1] for the approval of a "plan" which it states is for the purpose (1) of enabling it and certain of its subsidiaries to take certain action so as to enable them to comply with the provisions of § 11 (b) (2) of the act, and (2) for a declaration that a portion of its holding company system which has been submitted for our consideration (hereinafter collectively referred to as the "included companies") conforms fully to the standards of § 11 (b) (1) of the act.

After appropriate notice a public hearing was held. The hearing was completed on May 10, 1939, and an oral argument was heard on June 21, 1939. The Commission issued tentative findings and opinion on July 18, 1940, approving parts of the proposed plan, but refusing to make an over-all finding under § 11 (b).[2] Opportunity for oral reargument on particular matters was set for July 31, 1940, and subsequently postponed, at applicant's request, to October 21, 1940, at which time it was held.[3] The Commission has considered the record in this matter and now makes the findings set forth below.[3a]

I

The Applicable Statutory Standards

Columbia's application under § 11 (e) of the act, *supra,* in effect asks us

[1] Section 11(e) reads as follows: "(e) In accordance with such rules and regulations or order as the Commission may deem necessary or appropriate in the public interest or for the protection of investors or consumers, any registered holding company or any subsidiary company of a registered holding company may, at any time after January 1, 1936, submit a plan to the Commission for the divestment of control, securities, or other assets, or for other action by such company or any subsidiary company thereof for the purpose of enabling such company or any subsidiary company thereof to comply with the provisions of subsection (b). If, after notice and opportunity for hearing, the Commission shall find such plan, as submitted or as modified, necessary to effectuate the provisions of subsection (b) and fair and equitable to the persons affected by such plan, the Commission shall make an order approving such plan; and the Commission, at the request of the company, may apply to a court, in accordance with the provisions of subsection (f) of § 18, to enforce and carry out the terms and provisions of such plan. If, upon any such application, the court, after notice and opportunity for hearing, shall approve such plan as fair and equitable and as appropriate to effectuate the provisions of § 11, the court as a court of equity may, to such extent as it deems necessary for the purpose of carrying out the terms and provisions of such plan, take exclusive jurisdiction and possession of the company or companies and the assets thereof, wherever located; and the court shall have jurisdiction to appoint a trustee, and the court may constitute and appoint the Commission as sole trustee, to hold or administer, under the direction of the court and in accordance with the plan theretofore approved by the court and the Commission, the assets so possessed."

[2] Healy, Commissioner, did not join in these tentative findings and opinion.

[3] The unusual delay in rendering our opinion was caused in part by the complexity of the problems involved, in part by the applicant's suggestion at one time that we refrain from passing upon its application, and in part by applicant's request for delay of reargument.

[3a] The aforementioned tentative findings are, of course, superseded by the findings and opinion herein issued.

to find (1) that certain changes in its corporate structure are in furtherance of the provisions of § 11 (b) (2), 15 USCA § 79K (b),[4] and for a declaration that its system after the consummation of these changes conforms to the requirements of that section, and (2) to announce in a formal opinion, designated permanently to establish its status under § 11 (b) (1) of the act, that certain of its subsidiaries constitute a single integrated public utility system.

Section 11 (b) of the act, *supra,* deals both with the geographic integration (subsection (1)) and corporate simplification (subsection (2)). Subsection (1) dealing with physical integration is concerned with "integrated public utility systems," "additional systems," and "other businesses." The provisions are set forth below:

"(b) It shall be the duty of the Commission, as soon as practicable after January 1, 1938:

"(1) To require by order, after notice and opportunity for hearing, that each registered holding company, and each subsidiary company thereof, shall take such action as the Commission shall find necessary to limit the operations of the holding company system of which such company is a part to a single integrated public utility system, and to such other businesses as are reasonably incidental, or economically necessary or appropriate to the operations of such integrated public utility system: Provided, however, that the Commission shall permit a registered holding company to continue to control one or more additional integrated public utility systems, if, after notice and opportunity for hearing, it finds that—

"(A) Each of such additional systems cannot be operated as an independent system without the loss of substantial economies which can be secured by the retention of control by such holding company of such system;

"(B) All of such additional systems are located in one state, or in adjoining states, or in a contiguous foreign country; and

"(C) The continued combination of such systems under the control of such holding company is not so large (considering the state of the art and the area or region affected) as to impair the advantages of localized management, efficient operation, or the effectiveness of regulation.

The Commission may permit as reasonably incidental, or economically necessary or appropriate to the operations of one or more integrated public utility systems the retention of an interest in any business (other than the business of a public utility company as such) which the Commission shall find necessary or appropriate in the public interest or for the protection of investors or consumers and not detrimental to the proper functioning of such system or systems."

We need not in this case concern ourselves with the (A), (B), (C) standards, for Columbia has taken the

[4] The plan submitted would effect the following: (a) The dissolution of six inactive subsidiaries which have no assets; (b) the transfer to the applicant of three wholly owned subsidiary companies by Atlantic Seaboard Corporation, the only subsidiary company of the applicant which is a registered holding company; (c) the transfer of the assets of Eastern Pipe Line Company, a subsidiary of applicant, to Home Gas Company, another of its subsidiaries and the dissolution of the former; and (d) the transfer to the applicant of a nonutility subsidiary company of United Fuel Gas Company, a public utility subsidiary of the applicant.

position that the included companies constitute one integrated system and declined to introduce evidence designed to show that if certain properties were found not to be part of a single integrated system they constituted one or more additional systems which might be retained under the (A), (B), (C) standards.

Corporate simplification is dealt with in subsection (2). Its provisions are as follows:

"(b) It shall be the duty of the Commission, as soon as practicable after January 1, 1938:

"(2) To require by order, after notice and opportunity for hearing, that each registered holding company, and each subsidiary company thereof, shall take such steps as the Commission shall find necessary to insure that the corporate structure or continued existence of any company in the holding company system does not unduly or unnecessarily complicate the structure, or unfairly or inequitably distribute voting power among security holders, of such holding company system. In carrying out the provisions of this paragraph the Commission shall require each registered holding company (and any company in the same holding company system with such holding company) to take such action as the Commission shall find necessary in order that such holding company shall cease to be a holding company with respect to each of its subsidiary companies which itself has a subsidiary company which is a holding company. Except for the purpose of fairly and equitably distributing voting power among the security holders of such company, nothing in this paragraph shall authorize the Commission to require any change in the corporate structure or existence of any company which is not a holding company, or of any company whose principal business is that of a public utility company."

The term "integrated public utility system" found in subsection (1) of § 11 (b), *supra,* is defined in the act both with respect to electric utility companies and gas utility companies. These provisions are found in § 2 (a) (29), 15 USCA § 79b (a) (29). They, too, are set forth below:

"Section 2 (a) When used in this title, unless the context otherwise requires—

"(29) 'Integrated public utility system' means—

"(A) As applied to electric utility companies, a system consisting of one or more units of generating plants and/or transmission lines and/or distributing facilities, whose utility assets, whether owned by one or more electric utility companies, are physically interconnected or capable of physical interconnection and which under normal conditions may be economically operated as a single interconnected and coordinated system confined in its operations to a single area or region, in one or more states, not so large as to impair (considering the state of the art and the area or region affected) the advantages of localized management, efficient operation, and the effectiveness of regulation; and

"(B) As applied to gas utility companies, a system consisting of one or more gas utility companies which are so located and related that substantial economies may be effectuated by being operated as a single coördinated system confined in its operations to a single area or region, in one or more

states, not so large as to impair (considering the state of the art and the area or region affected) the advantages of localized management, efficient operation, and the effectiveness of regulation. Provided, that gas utility companies deriving natural gas from a common source of supply may be deemed to be included in a single area or region."

The Commission has considered carefully the effect of these statutory directions on the Columbia system as it has been presented to us, and the Commission has concluded (1) that the operations of the "included companies" of the Columbia system are not confined to a single "integrated public utility system" and therefore do not comply with the integration requirements of § 11 (b) (1), and (2) that the corporate structure of applicant's system does not comply with the provisions of § 11 (b) (2), *supra.*

Bearing in mind the applicable statutory provisions, we turn our attention to the Columbia system as submitted in an endeavor to show the reasons for these conclusions.

II

The Columbia System

Columbia Gas & Electric Corporation was incorporated in Delaware September 30, 1926. The company is a holding company owning securities of its subsidiaries, most of which are either gas or electric utilities as defined in the Holding Company Act,[5] and one of which, Atlantic Seaboard Corporation, is a registered holding company. The investment of applicant in these acknowledged subsidiaries is carried on its books at $367,122,742.[6] The public interest in this investment, represented by publicly held securities of applicant, is widely distributed. There are approximately 70,000 security holders of applicant's securities, consisting of $104,450,900 principal amount debentures; $110,102,700 par value of preferred and preference stocks; and 12,223,256 shares of no-par value common stock. The United Corporation, a registered holding company, owns 19.7 per cent of applicant's common stock.[7]

The major companies in the Columbia system own and operate facilities for the production, transmission, and distribution of natural gas, artificial gas, and mixed gas for heat and power. Several companies in the system own facilities for the production, transmission, and distribution of electric energy for light, heat, and power. Columbia's gas utilities serve 1,195 communities having a population of 4,766,311,

[5] Section 2(a) (3) 15 USCA § 79b (a) (3) reads as follows: "Section 2(a) When used in this title, unless the context otherwise requires—

"(3) 'Electric utility company' means any company which owns or operates facilities used for the generation, transmission, or distribution of electric energy for sale, other than sale to tenants or employees of the company operating such facilities for their own use and not for resale." . . .

Section 2(a) (4) reads as follow: "Section 2(a) When used in this title, unless the context otherwise requires—

"(4) 'Gas utility company' means any company which owns or operates facilities used for the distribution at retail (other than distribution only in enclosed portable containers, or distribution to tenants or employees of the company operating such facilities for their own use and not for resale) of natural or manufactured gas for heat, light, or power. . . ."

[6] Unless otherwise indicated, all facts and figures are as of December 31, 1938.

[7] Columbia filed an application pursuant to § 2(a) (8) (A) for an order declaring that it and its subsidiaries are not subsidiaries of the United Corporation. This application was withdrawn on November 6, 1939.

and its electric utilities serve 414 communities having a population of 1,310,863. Retail gas service is provided in the states of Ohio, Pennsylvania, West Virginia, Kentucky, New York, Maryland, Virginia, and Indiana.[8] In some of these states and in the vicinity of the District of Columbia gas is sold for resale. Electric service is supplied by applicant's subsidiaries in Ohio, Kentucky, and Indiana. The electric service area is smaller than but included within the general boundaries of the gas service area. In all, the company controls 47 subsidiaries,[9] one of which is a registered holding company, 7 of which are electric utilities, 24 of which are gas utilities (including 3 which are also electric utilities), 7 of which are engaged in the production and/or transmission of natural gas (including the registered subholding company), one of which is a service company, 5 of which are engaged in miscellaneous nonutility businesses, and 6 of which are inactive. In addition, Columbia has substantial investments in other companies, including American Water Works and Electric Company, Incorporated, a registered holding company, and the Cincinnati, Newport and Covington Railway Company, a transportation company, operating in Kentucky and Ohio.

Applicant's wholly owned subsidiary, Columbia Engineering Corporation, performs various executive, administrative, financial, statistical, and technical services for all of applicant's active subsidiaries. This service is said to be performed at cost.[9a] The headquarters of the service company is in New York where major decisions* relating to the operating companies in the system are made. The major officers of applicant are also the major officers of the service company.

In its plan Columbia has not presented to us its entire system. It has excluded from our consideration the following companies (hereinafter collectively referred to as the "excluded companies"):

(a) Columbia Oil & Gasoline Corporation;[10] (b) All the subsidiary companies of Columbia Oil & Gasoline Corporation;[11] (c) Michigan Gas Transmission Corporation; (d) Indi-

[8] The territory served includes, among others, the cities of Binghamton and Olean, New York; Pittsburgh (served in part) and New Castle, Pennsylvania; Steubenville, Zanesville, Columbus, Springfield, Lorain, Cincinnati, Dayton, and Toledo, Ohio; Covington and Lexington, Kentucky; Charleston, Huntington, and Wheeling, West Virginia; Staunton, Virginia; and Cumberland, Maryland. In Toledo, one subsidiary of applicant, The Northwestern Ohio Natural Gas Company, serves natural gas to 63,034 domestic customers, and another subsidiary, the Ohio Fuel Gas Company, serves artificial gas to 9,982 domestic customers. Though domestic consumers of artificial gas in Toledo, among others, have requested Northwestern to serve them natural gas in lieu of the present service to them by Ohio Fuel of artificial gas, Northwestern has refused.

[9] Not including Columbia Oil & Gasoline Corporation and American Fuel & Power. See *infra* notes 10 and 11.

[9a] See Re Columbia Engineering Corp. (1938) 3 SEC 335, 23 PUR(NS) 129.

* Words "(such as financing operations, preparation of construction budgets, rate changes, etc.)" omitted by order of February 28, 1941.

[10] Columbia Oil & Gasoline Corporation has filed an application pursuant to § 2(a) (8) (A) for an order declaring it not to be a subsidiary of Columbia Gas & Electric (it has also filed an application pursuant to § 3(a) (3) and § 3(a) (5) for an order exempting it as a holding company); and Columbia Gas & Electric Corporation has filed an application pursuant to § 2(a) (8) for an order declaring Columbia Oil & Gasoline and its subsidiaries not to be subsidiaries of Columbia Gas & Electric.

[11] Panhandle Eastern Pipe Line Company, a subsidiary of Columbia Oil & Gasoline Corporation, has filed an application pursuant to § 2(a) (8) for an order declaring it not to be a subsidiary of Columbia Gas & Electric, Co-

ana Gas Distribution Corporation; (e) American Fuel and Power Company; (f) All the subsidiaries of American Fuel and Power Company.

tucky on the south to Lake Erie on the north. The names of the included gas utility companies and the states in which they distribute gas at retail are:

	Ky.	W. Va.	Ohio	Ind.	Va.	Md.	Pa.	N. Y.
Amere Gas Utilities Co.		x						
Binghamton Gas Works								x
Bracken County Gas Co.	x							
Central Ky. Nat. Gas Co.	x							
The Cincinnati Gas & Elec. Co.			x					
Cumberland & Allegheny Gas Company		x				x		
The Dayton Power & Lt. Co.			x					
Fayette County Gas Co.							x	
Gettysburg Gas Corp.							x	
Greensboro Gas Company							x	
Huntington Dev. & Gas Co.		x						
The Keystone Gas Company								x
Manufacturers Gas Company							x	
The Manufacturers Light and Heat Company		x	x				x	
Nat. Gas Co. of W. Va.		x	x				x	
Northwestern Ohio Gas Co.			x					
Ohio Fuel Gas Co.			x	x				
Pa. Fuel Supply Co.							x	
Pt. Pleasant Nat. Gas Co.		x						
Union Lt. Ht. & Power Co.	x							
United Fuel Gas Co.		x	x					
Virginia Gas Distrib. Corp.					x			
Warfield Nat. Gas Co.	x							

We now turn our attention to the nature and operations of both the included and excluded companies to demonstrate why our conclusions were reached.

a. *The included companies.*

We have already explained that the gas subsidiaries distribute natural, manufactured, and/or mixed gas in eight states. This so-called major service area extends from central Indiana on the west to eastern New York on the east, from western Kentucky on the south to Lake Erie on the north.

The distribution lines of these companies are for the most part interconnected with each other by a network of transmission lines and gathering lines which connect the producing properties with the distributing properties. The sources of the natural gas are very largely derived from the "Appalachian Gas Province,"[11a] a huge geological basin believed to have been formed in the Paleozoic Age. That part thereof located within West Virginia and Kentucky contains the major gas reserve

lumbia Oil & Gasoline, or of Missouri Kansas Pipe Line Company; and Columbia Gas & Electric Corporation has filed an application pursuant to § 2(a) (8) for an order declaring Panhandle Eastern Pipe Line Company and its subsidiaries not to be subsidiaries of Columbia Gas & Electric. Panhandle Eastern has also filed an application pursuant to § 2 (a) (4) for an order declaring it not to be a gas utility, and an application pursuant to § 3(a) (3) (A) for an order exempting it as a holding company.

[11a] This province is a large geological area extending, speaking generally, from Oswego, New York, on the northeast to the Kentucky-Tennessee border on the southwest (about 500 miles), from Virginia border on the southeast to northwestern Ohio on the northwest (about 150 miles). Gas and oil deposits had been trapped in many of the geological strata in the area and are now found at various depths in different places. Pools of these deposits are fairly prevalent within the area (especially in a line from southern New York to Kentucky) but there is no continuous deposit throughout the area. There are a great many separate small pools and there are many different strata in which these deposits are found.

of the province. It is this section from which applicant's system obtains its chief supply of natural gas.* Columbia is one of the dominant factors in the production and marketing of natural gas in the Kentucky-West Virginia production areas. Its control over distributing outlets in Ohio, Pennsylvania, West Virginia, and Kentucky, together with its trunk line transmission system and gathering lines, enables it to exercise an important influence over the production, purchase, and marketing of natural gas not alone in Ohio but also in Kentucky and West Virginia and, to an extent, in Pennsylvania. As a result, independent producers in this large area are dependent upon Columbia for a market for their gas.

Few of the included gas utility companies in the applicant's system have more production than is necessary for their gas utility market requirements. In most cases they are dependent for part, and in some cases for all, of their supply of natural gas upon other companies in the system which have production and transmission facilities. As a result, applicant's gas transmission system covers substantially the whole of the area served with an interconnected network of field, transmission, and distribution lines, totaling 31,025 miles.

There are some companies in the system which either operate at a distance from the major service area or are dependent upon outside sources for their continued operation. For example, the Keystone Gas Company and Binghamton Gas Works, both gas distributing companies, operate in New York. Keystone distributes natural gas at retail in Olean, Watkins Glen, and Deposit, New York, and contiguous territory, with an estimated population of 40,100. Binghamton serves mixed gas in Binghamton, New York, and surrounding territory, a service area with an estimated population of 132,800. The distribution facilities of Keystone and Binghamton are along the pipe line of an affiliated company, the Home Gas Company, which is located in southern New York state, extending from Olean, New York, to the Hudson river, a distance of about 260 miles. Home Gas Company acts as a purchasing and transmission company for Keystone and Binghamton, to which companies it sells at the town borders. Except for a small amount of gas manufactured by Binghamton and a very small amount produced by Keystone, the gas supply for these companies is purchased from nonassociates and has been so purchased since the introduction of natural gas service, which followed the acquisition of these properties by Columbia. Very little** of the gas produced or purchased by the Columbia system companies in West Virginia or Pennsylvania was marketed in this New York state area. It was supplied by the Home Gas Company which was, by contract, bound to buy a vastly greater part of its requirements from the Belmont Quadrangle Drilling Corporation, a nonaffiliate. It is thus seen that these properties are located at great distances

* Sentence, "Columbia practically dominates the production and marketing of natural gas in the Kentucky-West Virginia production areas," omitted and new sentence substituted by order of February 28, 1941.

** Word "none" omitted and words "very little" substituted by order of February 28, 1941.

from the other gas utility companies in the Columbia system and that for the most part they are managed as a unit apart from the other operations of the system and that their sources of gas are also different.

The gas utility companies in Pennsylvania and northern West Virginia[12] seem also to be operated separately from the system gas utility company operations in Kentucky, Ohio, and southern West Virginia.* Of the aggregate in-put of these companies for the year ended December 31, 1938, approximately 26 per cent was received from other companies in the system. All but a very small amount of this gas comes from United Fuel Gas Company (directly and indirectly, through Hope Natural Gas Company, a nonaffiliated company).

Amere Gas Utilities Company and Virginia Gas Distribution Corporation are two other gas utilities within the applicant's system which are operated somewhat independently of the majority of applicant's gas utility subsidiaries. The distribution facilities of Amere Gas Utilities Company and Virginia Gas Distribution Corporation[13] are located along a pipe line extending eastward from the network of production facilities in eastern Kentucky through West Virginia, thence northeastward through Virginia and Maryland into Pennsylvania, where connection is made with lines of the Manufacturers Light and Heat Company which extend across the southern boundary of Pennsylvania and eastward to the city of Philadelphia. This pipe line through West Virginia, Virginia, and Maryland is known as the Atlantic Seaboard line. In West Virginia and Maryland it is owned by the Atlantic Seaboard Corporation; in Virginia it is owned by the Virginia Gas Transmission Corporation. In West Virginia the gas distribution facilities owned by Amere receive about 20 per cent of their supply from this pipe line, the rest being purchased from independent producers. The distribution facilities in Virginia, owned by Virginia Gas Distribution Corporation, receive all of their supply from the Atlantic Seaboard line. However, at present the primary market for the gas passing through the Atlantic Seaboard line is at Washington, D. C., in the environs of which gas is sold at wholesale to a nonaffiliated company. Approximately 80 per cent of the total gas passing through the Atlantic Seaboard line is sold to this company. Atlantic Seaboard Corporation has no production facilities; it buys gas under a contract from the Warfield Natural Gas Company, also a subsidiary of Columbia. The essential purpose of the Atlantic Seaboard line is, then, to provide an outlet for the gas produced by system companies in Kentucky and West Virginia.

[12] Consisting of Cumberland and Allegheny Gas Company, Fayette County Gas Company, Gettysburg Gas Corporation, Greensboro Gas Company, Manufacturers Gas Company, the Manufacturers Light & Heat Company, Natural Gas Company of West Virginia, and Pennsylvania Fuel Supply Company.

* Sentence, "The subsidiaries operating in Pennsylvania and northern West Virginia seem also to be operated as a separate unit in their relation to the group of utility companies in Kentucky, Ohio, and southern West Virginia," omitted and new sentence substituted by order of February 28, 1941.

[13] These companies and Virginia Gas Transmission Corporation are direct subsidiaries of Atlantic Seaboard Corporation, a registered holding company. Part of the present plan is to have Atlantic Seaboard Corporation transfer to Columbia these three subsidiaries. We shall discuss this aspect of the plan below.

Bridge Gas Company is another subsidiary of applicant which owns a gas transmission line. The line is 3 miles in length, extending across the Ohio river from Ashland, Kentucky, to a point near Coal Grove, Ohio. This line connects gas transmission lines of Inland Gas Corporation in Kentucky and the Buckeye Gas Service Company in Ohio, both of which companies are subsidiaries of American Fuel and Power Company, and all three of which companies are excluded companies under the present plan. Bridge Gas Company, an included company itself, has no operating relationships with any of the other included companies.

Turning to the electric utility operations of the system,[14] we find them located, for the most part, in the cities of Dayton, Cincinnati, and surrounding communities. In all, electric service is supplied to 414 communities with an estimated population of 1,310,900. The electric transmission and distribution facilities of the system are interconnected, except for the distribution property at Zanesfield, Ohio, belonging to Dayton, which has no direct physical connection with the lines of Dayton.[14a] The system's electric operations represent a substantial activity.[15] The total power generated and purchased amounted to 1,399,198,939 kilowatt hours. The system's generating facilities are owned and operated by the Cincinnati and Dayton companies, which companies interchange electric energy.[15a] The Cincinnati company (which owns two steam electric generating stations with an aggregate installed rated capacity of 270,000 kilowatts) sells power to all the other associate electric companies and in addition delivers power to several nonassociate companies. The Dayton Company (which owns three steam stations with an aggregate installed rated capacity of 136,750 kilowatts) purchases a small amount of its requirements from a nonassociate company and sells some power to Ohio Edison Company, also a nonassociate company.

The record shows that there is a total of $145,212,100 of electric property or property common to both gas and electric operations as follows:

Electric property	$116,919,900
Common property	4,855,800
Undistributed	23,436,400

For the years 1936, 1937, and 1938, the electric revenue was as follows:

1936	$26,203,870
1937	27,265,557
1938	26,958,087

The record also shows that within the electric service area there were:

Electric customers	346,146
Gas customers	286,822
Customers who received both gas and electric	237,469

[14] Consisting of the Cincinnati Gas & Electric Company, the Dayton Power and Light Company, the Union Light, Heat and Power Company, the Hamilton Service Company, the Harrison Electric and Water Company, the Miami Power Corporation (transmission only), and the Loveland Light, and Water Company. The first three companies also distribute gas at retail. However, the gas business of these three companies is not as large as their electric business.

[14a] Dayton sells power to the Ohio Edison Company, a nonassociate. Ohio Edison sells power to Ohio Electric Power Company, also a nonassociate, which in turn supplies power to the Zanesfield line.

[15] It includes 1,200 circuit miles of transmission lines and 11,965 circuit miles of distribution lines.

[15a] The flow of power from Cincinnati to Dayton is much greater than the flow from Dayton to Cincinnati. The Cincinnati plants have lower operating costs and a higher thermal efficiency than the Dayton plant.

The system's electric operations are for the most part operated as a business separate and distinct from* the major part of its gas operations. The applicant made no attempt to establish that the electric operations of the system constituted a separate integrated system, but chose to attempt to establish that its electric operations *and* its gas operations combined constituted a single integrated public utility system. In this it claims to have relied on an earlier decision of the Commission in Re American Water Works & Electric Co. (1937) 2 SEC 972. We reserve until later our comments upon this matter.

b. *The excluded companies.*

The excluded companies, namely, Columbia Oil & Gasoline Corporation and its subsidiaries; Michigan Gas Transmission Corporation; Indiana Gas Distribution Corporation; and American Fuel and Power Company and its subsidiaries, are important units in the Columbia system. As of December 31, 1938, applicant's investments in the excluded companies were carried on its books at $62,739,282, or approximately 15 per cent of its total investments; and for the year ending December 31, 1938, applicant derived revenue from these companies in the amount of $2,152,162, which equaled approximately 14 per cent of its total income.

Columbia Oil & Gasoline Corporation and subsidiaries. Columbia Oil & Gasoline Corporation was incorporated in Delaware in 1930 for the purpose of acquiring from applicant its oil and gasoline subsidiaries. Columbia Oil & Gasoline Corporation is a holding company. Its subsidiaries are engaged in the exploration and development of oil properties and in the production, transportation, and distribution of oil, gasoline, and attendant by-products. It also has a substantial interest (the entire Class A and Class B preferred stocks and 50.08 per cent of the common stock) in Panhandle Eastern Pipe Line Company. Columbia Oil acquired this interest with money advanced by applicant. Columbia Oil's holding in Panhandle is held in trust pursuant to the terms of a consent decree, entered by a Federal Court in January, 1936, and explained in more detail below.

Columbia Oil through its subsidiaries, in addition to the leases owned by them, owns the oil rights in lands held under lease by the gas utility subsidiaries of Columbia, practically all of which are located within the area served by the included companies. The subsidiaries of Columbia Oil, now engaged in the oil production and gasoline extraction businesses, were formerly direct subsidiaries of applicant. During that time certain operating relationships were established. In 1930, the oil and gasoline subsidiaries were transferred to Columbia Oil. It may be that this was done because of activities of state Commissions which in attempting to fix rates had insisted that a portion of the profits of the oil and gasoline subsidiaries be deducted from the cost of operations of the gas utility subsidiaries, a contention sustained by the Supreme Court of the United States.[16] Among

*Words "the major part of" inserted by order of February 28, 1941.

[16] See United Fuel Gas Co. v. Kentucky R. Commission, 278 US 300, 73 L ed 390, PUR 1929A 433, 49 S Ct 150.

the subsidiaries of Columbia Oil which have operating relationships with included companies are Virginian Gasoline & Oil Company, Union Gasoline and Oil Corporation, and the Preston Oil Company. A typical arrangement is that existing between United Fuel Gas Company and the Charleston group of companies (United Fuel Gas et al.) and Virginian Gasoline & Oil Company. The former have granted to Virginian the right to drill for oil on substantially all of the acreage owned or leased or controlled by them, and have also granted Virginian the right to buy from this group of companies any oil wells which may be brought in as a result of drilling operations of the gas companies. Such oil wells are to be paid for at cost. In return, Virginian is obligated to sell back to the gas companies any oil wells which may subsequently develop as gas wells, or any gas well which Virginian may bring in while drilling for oil on land which it owns. Also, the United Fuel Gas Company and the Charleston companies have granted to Virginian the right to extract gasoline and, to some extent, other hydrocarbons from the natural gas produced and purchased by this group of gas companies.

There is much in the record which at least lends plausibility to the claim that the gas utility companies bear an excessive portion of the cost of acquiring and carrying and exploring the acreage upon which the gasoline companies have been granted the right to drill for oil. For example, the oil companies* are obliged to bear only the cost of such wells drilled by the gas utility companies as are commercially productive of oil, and inasmuch as the principal drilling in the reserve acreage is carried on by gas utility companies, those companies bear the preponderance of the cost of testing and proving the reserve acreage.

When the aforementioned contracts were made the same interests controlled both contracting parties and it is not claimed that these contractual relationships were entered into at arm's length.

Though applicant claims not now to control Columbia Oil[17] the fact remains that it owns all of Columbia Oil's outstanding debentures ($21,000,000 principal amount) and preferred stock (400,000 shares). The common stock of Columbia Oil is owned by the public, including many persons who own applicant's common stock. The preferred stock is entitled to elect the largest number of directors of Columbia Oil, which constitutes a minority of the whole board.

In September, 1930, Columbia Oil acquired a controlling interest in Panhandle Eastern Pipe Line Company. Panhandle Eastern, directly and through wholly owned subsidiaries, is engaged in the production, purchase, transportation, and sale of natural gas. The company operates a natural gas transmission line extending from the

* Words, "only in rare instances bear the cost of such oil wells as are commercially productive; therefore, all of the cost of acquiring and carrying the reserve acreage and the cost of testing and proving the acreage which must be abandoned as unproductive is borne by the gas companies," omitted and words, "are obliged to bear only the cost of such wells drilled by the gas utility companies as are commercially productive of oil, and inasmuch as the principal drilling in the reserve acreage is carried on by gas utility companies, those companies bear the preponderance of the cost of testing and proving the reserve acreage" substituted by order of March 21, 1941.

[17] See *supra*, note 10.

Amarillo gas field in the Texas Panhandle through the states of Oklahoma, Kansas, Missouri, and Illinois to a point in the Illinois-Indiana state line where it connects with the pipe line of Michigan Gas Transmission Company. Panhandle's gross revenue from its pipe-line operations in 1939 was $11,461,388. Almost none of this was derived from the sale of gas to the included companies, which to date have purchased only negligible amounts of natural gas produced in the western fields.

Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation. Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation are wholly owned subsidiaries of applicant. Michigan Gas is a connecting link whereby natural gas from the Amarillo fields in Texas is sold to its market in Detroit, Michigan, by Panhandle Eastern Pipe Line Company. The transmission line of Panhandle connects with the transmission line of Michigan at the Illinois-Indiana border. The Michigan line (often called "Detroit Extension") passes within 8 miles of Toledo, where one included company serves manufactured gas and another included company serves natural gas produced in the eastern fields.

Michigan sells natural gas to Indiana Gas Distribution Corporation,[18] which in turn redistributes natural gas at retail in several towns in central Indiana, and to the Ohio Fuel Gas Company, also a subsidiary of applicant.

Antitrust suit involving applicant, Columbia Oil, Panhandle, and Michigan Gas. On March 6, 1935, the United States commenced a proceeding in equity under the antitrust laws against Columbia Gas & Electric Corporation, Columbia Oil & Gasoline Corporation, and certain named individuals. On October 30, 1935, the government filed an amended and supplemental petition superseding the original petition. The amended petition charged the defendants with engaging in a complicated course of activities in violation of the antitrust laws, the essential feature of which was the acquisition of and control over Panhandle Eastern Pipe Line Company, and the exercise of such control to protect the gas operations of the Columbia system in the Michigan-Ohio-Indiana area (i. e., the included companies) from the competition which Panhandle Eastern Pipe Line threatened to introduce. On January 29, 1936, pursuant to a stipulation entered into between the government and the defendants, a consent decree was entered in the proceeding. The declared purpose of the consent decree was to* insure that Panhandle Eastern Pipe Line Company was in a position of free and independent action in the production, transmission, and distribution of natural gas in competition with others. The chief device upon which the decree relied to accomplish this objective was the voting trust established by the decree. Gano Dunn was appointed voting trustee and it was to him that Columbia Oil was to transfer its stock of Panhandle Eastern. Apparently the Department of Justice believes that the decree failed to accomplish its ob-

[18] Indiana Gas Distribution Corporation has about 1,400 retain customers and is thereby technically a "gas utility" under the act.

* Words "restore Panhandle Eastern Pipe Line to" omitted, and words "insure that Panhandle Eastern Pipe Line Company was in" substituted by order of February 28, 1941.

jective,[19] for in December, 1938, that department sought to reopen this decree by filing a supplemental complaint. This supplemental complaint set forth facts designed to show that the original consent decree had been ineffectual. Following the government's motion to vacate the earlier decree and the filing of the supplemental complaint, Columbia at once began negotiations with the Department of Justice with a view to entering another consent decree. The plan proposed by the defendants proved unacceptable to the Department of Justice. On May 15, 1939, the Department of Justice filed with the court a motion asking for leave to file an amended complaint. Pending consideration of this motion the defendants filed with the court a plan intended to accomplish a more complete separation of the two corporations. The principal results of this proposed plan would be: (1) Applicant would reacquire the oil and gasoline subsidiaries of Columbia Oil and Gasoline which it formerly owned;[19a] (2) applicant would completely divorce itself of its stock interest in Columbia Oil & Gasoline Corporation; (3) Columbia would agree to dispose of all of its gas properties and operations in the states of Indiana and Michigan; (4) Panhandle Eastern Pipe Line Company would be given an opportunity to acquire complete ownership of the pipe line from the Texas Panhandle to Detroit (thus acquiring the line now owned by Michigan Gas Transmission and Indiana Gas Distribution).

The court referred the plan to a special master before whom hearings were held. The special master subsequently filed his report recommending the adoption of the plan with certain modifications. The court has not as yet acted upon these recommendations.

Therefore, we do not know what is to become of applicant's interests in any of these properties.

American Fuel and Power Company and its subsidiaries; antitrust litigation. American Fuel and Power Company was incorporated in Delaware in 1928. It owns 99 per cent of the capital stock of Inland Gas Corporation and 99 per cent of the voting trust certificates, representing no par common stock of Kentucky Fuel Gas Corporation (both of which are in reorganization under § 77B of the Bankruptcy Act 11 USCA § 207), and the entire capital stock of several gas distributing and purchasing companies. Applicant owns 76 per cent of the common stock of American Fuel and also has substantial investments in the senior securities of Inland Gas and Kentucky Fuel. Applicant has open-account claims against all three companies.

American through its subsidiaries controls gas rights principally in Kentucky and in West Virginia. These fields are part of the same geological

[19] Indeed, the Department of Justice claims that after the date of the original decree applicant strengthened its control over Panhandle Eastern by, among other things, its acquisition of the physical means of access by Panhandle Eastern to the Detroit market. This was accomplished in 1936 by the organization of Michigan Gas Transmission Company to which applicant advanced funds to construct a pipe line from Panhandle Eastern's eastern terminus at Dana, Illinois, to Detroit. It is noted that prior to the entry of the original decree Panhandle had itself contracted with the city of Detroit to build the extension.

[19a] This plan recognized the necessity of obtaining this Commission's approval of the acquisition under the Holding Company Act. Other aspects of the plan would also have to be submitted for our approval.

basin as the fields of the included companies engaged in the production of natural gas. American through its subsidiaries sells gas almost entirely for industrial purposes and at wholesale within the same general area served by the included companies. American has been in bankruptcy since 1934. Its affairs have since then been in the hands of a trustee; its charter has been repealed for nonpayment of taxes. On November 4, 1938, the Department of Justice filed a suit in the district court of the United States for the district of Delaware against Columbia Gas & Electric Corporation, Warfield Natural Gas Company, and certain individual defendants, the declared purpose of which is to require applicant to divest itself of the control and ownership of securities of American Fuel and Power Company and its subsidiaries, Inland Gas Corporation and Kentucky Fuel Gas Corporation. It is claimed that Columbia acquired these companies to suppress competition in its Ohio markets (served by the included companies) in which markets the American subsidiaries might be logically expected to compete. This case is still pending. Negotiations for its settlement by a consent decree have not been consummated. Here again we do not know what is to become of applicants' interests in these companies.

III

Compliance with § 11 (b) (1)

[1–3] The definition of an "integrated public utility system," both as applied to electric and gas utilities, has been set forth above. It is unnecessary to repeat the provisions here except to recall that the points of emphasis in the definition of an "integrated gas utility system" are whether substantial economies can be effectuated if gas utility companies are operated as a single coördinated system confined in its operations to a single area or region, not so large as to impair (considering the state of the art and the area affected) the advantages of localized management, efficient operation, and the effectiveness of regulation. It is also plain in the definition that gas utility companies deriving natural gas from a common source of supply may be "deemed" to be included in a single area or region. This necessitates a judgment as to the place and importance of the gas producing and transmission companies of the system in resolving any §11 (b) (1), 15 USCA § 79k (b) (1), problem, whether or not these companies are gas utility companies by definition under the act.

The mere recitation of the nature of the businesses of the included and excluded companies and their operating relationships makes it clear that the exclusion from our consideration of the companies discussed in part (b) of § 11, *supra*, of this finding and opinion seriously complicates a determination of whether the included companies constitute one integrated public utility system in compliance with § 11 (b) (1) of the act, *supra*.[20] However practical may be the reasons

[20] We do not criticize Columbia for not now presenting to us for scrutiny its entire system. We accept Columbia's explanation that the excluded companies and properties were excluded from consideration (1) because the applicant was desirous of obtaining as soon as possible an order of compliance with § 11 which might improve its position in connection with a proposed comprehensive refunding program, and (2) because of the imprac-

which prompted Columbia to exclude certain properties from our examination, these considerations do not lessen the difficulty of the problems presented to us. Indeed, they become more difficult, for the issue is then not whether we can say that the Columbia system constitutes one integrated system, but whether we can say that the included companies constitute one integrated system of electric and gas properties in view of the fact, however excusable, that certain other properties are excluded from our consideration.

We indicated in Re American Water Works & Electric Co. (1937) 2 SEC 972, that it was the policy of this Commission to render all appropriate assistance to a holding company system desiring to comply voluntarily with the integration and simplification provisions of the act. Pursuing that policy we rendered, in the American Water Works Case, an over-all advisory opinion regarding compliance with the provisions of § 11 (b) of the act. Though the act makes no explicit provision for this type of procedure, we believe that such a course has many advantages and we are persuaded to pursue it whenever the occasion permits. However, it must be remembered that an advisory opinion under § 11 (e) must be given with great care and caution. An over-all finding of compliance with § 11 (b) goes to the very heart of the act. A finding on an incomplete or uncertain state of facts would be unfair to the successful administration of the act; to the future investing public and the applicant itself.

In attempting to reach a decision on whether we can give applicant the over-all finding it has requested, we are met with several obstacles, any one of which might constitute a basis for disapproving the instant application. Among them are the pending antitrust suits. It is to be remembered that the charges of the Federal government through the Department of Justice include, speaking generally, allegations that the acquisition or organization by applicant of certain of the excluded companies, such as Panhandle Eastern Pipe Line, Michigan Gas Transmission, Indiana Gas Distribution, American Fuel & Power and its subsidiaries, and certain subsidiaries of Columbia Oil, was for the purpose of restraining trade and suppressing competition in the very areas served by the included companies or in areas to which they could extend their service. This fact alone, considered in the light of the statutory references in the definition of intergrated gas utility system to, inter alia, "efficient operation," "effectiveness of regulation," would make a favorable response most difficult while the antitrust cases and therefore the future ownership of applicant's present interest in the subject corporations are undecided.[21]

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ticability of expecting prompt solution as to the excluded companies owing to the pendency of the antitrust cases which affect the excluded companies and applicant's relation to them. It was not clear whether these companies could be retained by applicant.

[21] A number of representatives of cities served by Columbia appeared before this Commission in this proceeding and urged us not to find that the Columbia system complies with the provisions of § 11(b) of the act. These representatives stated that public consumers of gas supplied by Columbia's companies had paid excessive rates because of the alleged lack of effective competition. Without passing on the merits of these claims, we note that protection of the consumer is one of the fundamental objectives of the act.

The failure to include within the plan the properties of American Fuel & Power and its subsidiaries creates another serious obstacle. These properties operate wtihin the same area as the included properties and their relationship to Columbia and the outcome of the antitrust suit might seriously affect the status of the Columbia system under the integration provisions of the act.

This is not to say that a mere settlement of the antitrust cases irrespective of subsequent consequences would eliminate the difficulties due to the withholding from our consideration of the companies involved in those proceedings. Much may depend upon who ultimately controls those properties, the manner of their operation, and their relationship with the utilities in applicant's system.

The same observations apply with equal or greater force to the exclusion of certain subsidiaries of Columbia Oil and Gasoline Corporation which extract gasoline from the very gas that some of the included companies sell to the public under a system of rate regulation. They have other important operating relations with certain of the included companies and under the terms of the decree proposed by the applicant for the settlement of one of the antitrust cases may return to the direct ownership of applicant.

The exclusion of the Panhandle Eastern Company with its large reserves of gas and the proximity of its lines and the lines of the transmission companies it supplies (Indiana Gas Distribution and Michigan Gas Transmission) to the territory served by the included gas companies are among the serious obstacles to a favorable decision and greatly increase our difficulties in passing on the plan applicant has presented to us.

The presence within the system of Keystone Gas Company and Binghamton Gas Works, located as they are at great distances from the system's major service area, raises the problem whether they are so located and related to the included gas utility companies in applicant's system that substantial economies can be effectuated by operating all of them as a single coördinated system, confined in its operations to a single area or region. The same observation can be made with respect to the gas utilities operating in Pennsylvania and northern West Virginia. A similar observation can also be made with regard to the gas utility companies operating along the Atlantic Seaboard line which are also far removed from the system's major service area.

However, we do not find it necessary to decide any of these questions. Columbia's application asks only that we find that its system as presented to us constitutes a single integrated public utility system with certain nonutility properties incident thereto. That is all we are asked to decide. We are not asked to determine whether, if the system is not confined to one integrated public utility system, additional systems may be retained under the (A), (B), (C) standards. Indeed, Columbia expressly declined to present any evidence directed to the (A), (B), (C) issues. Thus, because of the nature of the application, we are called upon to decide but one question; i. e., do the included companies constitute one integrated system? Our answer is in the negative.

We rest our decision on our conclusion that the electric and gas utilities (of the included companies) together do not constitute "a *single* integrated public utility system."[21a] No specific definition is found in the act of an integrated public utility system operating both gas and electric utilities. The act, § 2 (a) (29), 15 USCA § 79b (a) (29), separately defines "integrated public utility system" for electric utility companies and for gas utility companies. In separately defining "integrated public utility system" for electric utility companies and for gas utility companies different standards were prescribed. Moreover, the very nature of the properties involved and the nature of the requirements prescribed in the two separate definitions are such as to preclude the possibility of reading both together as a definition which could be applicable to a combined system. Counsel for applicant recognized this fact but argued[22] that the legislative history and the policy of the act as expressed particularly in § 8, 15 USCA § 79h,[23] indicate that both gas and electric companies might be retained within one integrated system. We have considered both the provisions of § 8 and its legislative history and find nothing which either explains away or casts doubt upon the clear meaning of §§ 11 and 2 (a) (29) of the act, *supra*. We think § 8 does not control the problem of whether electric and gas utilities may both be operated within a single integrated system. Speaking generally, we read § 8, *supra*, as dealing exclusively with the impact of state laws (dealing with the combined operation within the same area of electric and gas utilities by a single company or by companies owned by one company) on the acquisitions by holding companies and their subsidiaries of interests in electric and gas utilities. Section 8 expresses the policy that the state law shall control *acquisitions* of properties which may result in combined operations, whereas § 11 is concerned with *retentions* of properties.

Having concluded that electric properties and gas properties do not constitute one integrated system, we point out that they may be retained as separate integrated systems only where they conform to the (A), (B), (C) standards of § 11 (b) (1) dealing with additional systems. Because of the limited scope of Columbia's application under which Columbia declined to offer any evidence directed to the (A), (B), (C) issues, as above explained, we are not called upon here to determine whether applicant's elec-

[21a] Though this conclusion is not the one upon which we rested our tentative findings, the matter is one which was fully briefed and argued by counsel for applicant and Commission counsel at the initial oral argument.

[22] Applicant's brief, p. 32.

[23] Section 8 reads as follows: "Section 8. Whenever a state law prohibits, or requires approval or authorization of, the ownership or operation by a single company of the utility assets of an electric utility company and a gas utility company serving substantially the same territory, it shall be unlawful for a registered holding company, or any subsidiary company thereof, by use of the mails or any means or instrumentality of interstate commerce, or otherwise,

"(1) to take any step, without the express approval of the state Commission of such state, which results in its having a direct or indirect interest in an electric utility company and a gas utility company serving substantially the same territory; or

"(2) if it already has any such interest, to acquire, without the express approval of the state Commission, any direct or indirect interest in an electric utility company or gas utility company serving substantially the same territory as that served by such companies in which it already has an interest."

tric properties may be retained as one or more additional integrated public utility systems. Consequently, it is unnecessary, if not impossible, for us to indicate whether if we were called upon to decide that the electric properties constitute one or more additional integrated public utility systems we would find that they did and that they might as such be retained by applicant.

This Commission has held in Re American Water Works & Electric Co. *supra,* that both the gas and electric properties of the American Water Works system constituted a single integrated public utility system. In that case the gas operations were small and relatively inconsequential and the opinion is susceptible to the construction that the conclusion was rested not upon a view as to a single integrated system contrary to the views herein expressed, but upon the satisfaction of the standards applicable to additional integrated public utility systems. We do not regard our decision in the American Water Works Case as controlling here.

Since this conclusion makes compliance with applicant's request impossible, it is unnecessary to consider whether other aspects of the system's operation might be found to offend the definition of an integrated system. And it is similarly unnecessary to consider Columbia's interests in "other business"—nonutilities or otherwise —in an endeavor to determine whether these interests may be retained.

IV

Compliance with § 11 (b) (2)

[4–9] Under the provisions of § 11 (b) (2) (quoted above) we are concerned, speaking generally, with determining whether the corporate structure and the continued existence of any company in applicant's system unduly or unnecessarily complicate the structure, or unfairly or inequitably distribute voting power among security holders.

a. *Simplification of the structure.*

Columbia has proposed four steps purportedly designed to build its system in compliance with the provisions of § 11 (b) (2). These steps are as follows:

(1) The dissolution of six inactive subsidiaries which have no assets; (2) the transfer to the applicant of three wholly owned subsidiary companies by Atlantic Seaboard Corporation, the only subsidiary company of the applicant which is a registered holding company; (3) the transfer of the assets of Eastern Pipe Line Company, a subsidiary of the applicant, to Home Gas Company, another of its subsidiaries, and the dissolution of the former; and (4) the transfer to the applicant by United Fuel Gas Company, a public utility subsidiary of applicant, of Big Marsh Oil Company, a nonutility subsidiary.

(1) The six subsidiary companies whose dissolution is contemplated[24] by the plan engage in no business and own no property. To this extent, therefore, the plan proposes merely the de jure recognition of existing fact. Since these companies serve no useful purpose their continued existence may

[24] These are: The Licking River Bridge Company, the Fayette Gas Fuel Company, Sewickley Gas Company, Chenango Gas Company, Inc., the Consumers Natural Gas Company, and the Liberty Light and Power Company.

well be considered, on any functional basis, to complicate unduly and unnecessarily the structure of applicant's holding company system. Nevertheless, we do not find it necessary for us to approve their dissolution for the applicant is free under the act to dissolve the companies at its will without our permission or approval.

(2) The three wholly owned subsidiary companies of Atlantic Seaboard Corporation, whose transfer to the applicant is proposed, are Amere Gas Utilities Company, Virginia Gas Distribution Corporation, both gas utility companies, and Virginia Gas Transmission Company. Upon the transfer of the two gas utility companies, Atlantic Seaboard Corporation would cease to be a holding company. And the transfer of Virginia Gas Transmission Company, a nonutility, will eliminate one of the last indirect subsidiaries in the Columbia system. Since Columbia Gas & Electric Corporation is itself a subsidiary of the United Corporation, a registered holding company, this result is consonant with the objectives of § 11 (b) (2) of the act which, among other things, makes it our duty to require, ". . . each registered holding company (and any company in the same holding company system with such holding company) to take such action as the Commission shall find necessary in order that such holding company shall cease to be a holding company with respect to each of its subsdiary companies which itself has a subsidiary company which is a holding company."

While the end thus sought to be attained might, under the circumstances, be accomplished by other means, since the purposes of the act are being achieved and the methods of accomplishment are not inconsistent with the letter or spirit of the act, we will approve this aspect of the plan.

(3) The physical assets of Eastern Pipe Line Company that are proposed to be transferred to Home Gas Company consist of 169 linear miles of pipe extending from the vicinity of Unionville, N. Y., where it connects with the pipe line of Home Gas Company, to Garfield, N. J., and Tappen, N. Y., a distance of about 40 miles. The only business of Eastern Pipe Line Company is the transmission of gas for Home Gas Company. The latter owns over 956 linear miles of pipe line reaching from Olean, N. Y., to Unionville and thence to Rockland County, N. Y., a distance of about 250 miles. Entirely dependent upon Home Gas Company, the business of Eastern Pipe Line Company is but a segment of the larger company. Consequently, it would seem that the proposed elimination of Eastern Pipe Line Company is a step toward the simplification of the system's structure. Eastern Pipe Line Company serves no useful purpose as a separate corporate entity and for the reasons given in approving the first portion of the plan we approve this provision of it.

(4) The plan, as submitted, proposed that United Fuel Gas Company, a gas utility company, transfer its subsidiary, Big Marsh Oil Company, to Columbia Gas & Electric Corporation. Subsequent to the filing of the plan and hearings thereon, but prior to any determination by the Commission as to this phase of the plan, the transfer was in fact made and Big Marsh Oil Company now is a direct subsidiary of Co-

lumbia Gas & Electric Corporation. In view of this fact, any approval or disapproval of this portion of the plan would be meaningless and the status of these companies as affected by the transfer is only pertinent to this proceeding in considering the existing situation of the system rather than as a part of a plan pursuant to § 11 (e) of said act.

In the light of circumstances hereinafter considered, the part of the program so far disposed of does not appear very substantial. But to the extent that a plan proposes steps, even of a minor nature, which at sometime or another will be necessary or appropriate to effectuate in full the provisions of § 11 (b) (2), it does not merit our disapproval. As we pointed out in Re Peoples Light & P. Co. (1937) 2 SEC 829, 836, 21 PUR(NS) 1, 8. "The problem of consummating integrated public utility systems under the act is of necessity in many cases an evolutionary rather than a revolutionary process. As a practical matter, it will often be necessary to accomplish the ultimate objective of the act by a series of steps rather than by one direct and final step."

Since the applicant is the only person affected by this plan, it becomes unnecessary to make any findings concerning its fairness.[25]

Though we indicate our willingness to approve these transactions as appropriate under § 11 (e) of the act, the details of the consummation of these transactions have not been presented to us. Consequently, we are unable to give final approval to these transactions.

b. *Distribution of voting power.*

[10] Columbia has requested a finding that after the consummation of the aforementioned steps, its corporate structure will fully conform to the requirements of § 11 (b) (2). This request makes it necessary for us to consider whether the voting power is fairly and equitably distributed among the security holders of the system. We cannot find that it is. On the contrary, we conclude that the voting power is unfairly and inequitably distributed among the security holders of at least three of the more important companies in the system, namely, Columbia itself, the Dayton Power & Light Company and The Cincinnati Gas & Electric Company.

The capitalization of applicant at December 31, 1938, was as follows:

Securities	Amount	Per Cent
Long-term debt (debentures)	$104,570,700	29.14
Preferred stock (989,551 shares)	98,831,100	27.54
Preference Stock (124,020 shares)	12,386,000	3.45
Common stock (12,304,282 shares) ...	12,304,282	3.43
Special capital surplus ..	125,774,719*	35.05
Surplus prior to Jan. 1, 1938	1,405,779	0.39
Earned surplus since Dec. 31, 1937	3,590,230	1.00
	$358,862,810	100.00

* Including $9,680,780 representing liquidating premium on preferred stock.

While each share of the common and preference stock has one vote at the annual election of directors, the

[25] The plan (p. 12) recites: "None of the foregoing proposed changes will require stockholders' action by any company of which any stock is owned outside Columbia system, or require the dissolution or merger of any company having outside stockholders. The changes will not affect the amounts of publicly held securities of Columbia Gas & Electric Corporation or any of its subsidiary companies."

preferred stock does not participate in such elections unless four quarterly dividends thereon are in default. In that event each preferred share acquires one vote. Default, however, does not work the disenfranchisement, partial or otherwise, of the common or preference stock nor is provision made for class voting. Consequently, as applicant's president readily admitted, even with cumulative voting, for which provision is made in applicant's charter, the preferred stock can at best elect but one of the applicant's fifteen directors. The inequitableness of the situation is demonstrably clear when this relative voting strength is juxtaposed with the relative investments (per books) of the classes of security holders. The preferred and preference stocks represent (including $9,680,780 of surplus representing liquidation premium on preferred stock), an investment of $120,897,880. The common stock and surplus represent an investment of $133,394,230.[26] Thus the investment interest of the common stock exceeds the investment interest of the preferred by only $12,496,350. Yet the common stock has 99 per cent of the voting power.

Similar situations obtain in the corporate structure of the Dayton Power and Light Company and the Cincinnati Gas & Electric Company. On December 31, 1938, the former had outstanding 100,000 shares of preferred stock, all in the hands of the public, and 360,000 shares of common stock, all held by the applicant. As of the same date the latter had outstanding 400,000 shares of preferred stock, all publicly held and 750,000 shares of common stock, all of which were owned by the applicant. The preferred stock of the former was carried at $10,000,000 and represented 46.54 per cent of capital and surplus of the company, while that of the latter was carried at $44,104,000 and represented 51.4 per cent of the capital and surplus of that company.

The common stock of both companies is entitled to one vote per share at the annual elections of directors. Neither preferred stock, however, has any voice in elections unless four quarterly dividends thereon have been passed, in which event each preferred share becomes entitled to one vote. As in the case of the applicant, such a default does not effect any disenfranchisement of the common stock. Therefore, even with cumulative voting, which under applicable Ohio statutes may be had if any stockholder gives notice of his intention to cumulate his vote, the preferred shareholders of the former could at best elect three out of the company's thirteen directors, while those of the latter might elect five of that company's board of fifteen.

The charter of neither company, however, provides for class voting. Consequently, the probability is remote that either group of preferred shareholders will be able, in the event of default, to elect even the smallest number of directors mathematically possible. With the common stock all held by one stockholder, there is every indication that the right of the preferred

[26] Including $116,093,939 of special capital surplus, which is a reserve to be used for further possible write-downs. If this reserve is wholly used for write-downs, then the assets behind the common stock will be reduced to $17,300,291, or $103,597,589 less than the preferred and preference stocks investment. Yet under the present set-up the common stock would still have 99 per cent of the voting power.

shareholders of these companies to participate in elections in the event of default will prove wholly illusory protection.

Though the charters of these companies make provision for preferred stock voting rights in the event of default, we find that these rights are inadequate. To satisfy the requirements of § 11 (b) (2) it is not sufficient to give preferred stockholders a vote. The vote, to be effective, must be such as will afford them recognition in the corporation in an amount substantially corresponding to the proportion of their investment in the corporation. This is particularly true where, as in these cases, preferred stock is a junior security. In these cases we are unable to say that voting power is fairly and equitably distributed when shareholders representing an interest such as these preferred stocks have are without any real means of securing effective representation, even in case of default.[26a]

c. *Conclusion.*

We, therefore, conclude that after the plan shall have been carried out, applicant's system will not conform to the standards of § 11 (b) (2).[27]

An order conforming to these findings and opinion will issue.

ORDER

Columbia Gas & Electric Corporation, a registered holding company, having filed an application pursuant to § 11 (e) of the Public Utility Holding Company Act of 1935, 15 USCA § 79k (e), for the approval of a "plan" which it stated was for the purpose (1) of enabling it and certain of its subsidiaries to take certain action so as to enable them to comply with the provisions of § 11 (b) (2) of the act, 15 USCA § 79k (b) and (2) for a declaration that a portion of its holding company system, which had been submitted under the plan (referred to as the "included companies"), conforms fully to the standards of § 11 (b) (1) of the act, *supra.*

A public hearing having been held after appropriate notice; oral argument having been heard; the Commission having issued tentative findings and opinion and oral reargument having been heard; the Commission having considered the record in this matter; and having made and entered its findings and opinion herein;

It appearing to the Commission that certain action proposed in the plan as action enabling Columbia Gas & Electric Corporation and certain of its subsidiaries to comply with the provisions of § 11 (b) (2) of the act are appropriate under § 11 (e) of the act, but that no final order may be issued at this time authorizing this action for the reasons more fully set forth in the findings and opinion herein;

And it further appearing to the Commission that the holding company

[26a] Our concern is with the rights of the preferred stockholders as a class. It is of no consequence, therefore, that on a given record date a large part of the preferred stock is held by those who also own the common stock. This is a more fortuitous circumstance, the permanency of which must be highly conjectural.

[27] Since in any event the finding sought cannot be made for the reasons given, we have considered it unnecessary to explore more fully applicant's system to determine in what other respects, if any, the requirements of § 11(b) (2) have not been met.

system of Columbia Gas & Electric Corporation does not conform to the provisions of § 11 (b) of the act;

It is *ordered* that the plan filed pursuant to § 11 (e) of the act be and it hereby is disapproved.

MINNESOTA SUPREME COURT

State

v.

Tri-State Telephone & Telegraph Company

R. W. Krohn et al.

v.

Same

[No. 32445.]

(— Minn —, 295 NW 511.)

Reparation, § 40 — Amount — Refund of excess charges — Penalties.

Pursuant to a district court judgment, affirmed by this court (State v. Tri-State Teleph. & Teleg. Co. [1939] 204 Minn 516, 28 PUR(NS) 158, 284 NW 294) and a supplemental decree thereafter entered, the company refunded to its subscribers the difference between the amounts charged under the old rates from June 1, 1936, to June 1, 1939, and the amounts charged under the new rates authorized by the Railroad and Warehouse Commission in its order of March 31, 1936, with interest at 6 per cent on the excess of each payment from the date thereof. In this proceeding by subscribers to compel the refundment of penalties collected by the company during the same period for failure to pay bills before the respective discounts dates, it is *held:*

1. The penalties are not part of the "excess sums" required to be refunded by the judgment and supplemental decree.

2. The company was not required to set off the amount of the excess charged under the old rate against subsequently accruing bills so as to entitle subscribers to discounts for prompt payment thereof.

[December 27, 1940.]

Headnote by the COURT.

APPEAL *from order denying claims by customers of a telephone company for a refund of penalties under a decree for refund of excess sums collected during litigation; affirmed.*

APPEARANCES: John T. Kenny and Lewis E. Lohmann, both of St. Paul, and Henry W. Volk, of Minneapolis, for appellants; C. B. Randall and Ralph A. Stone, both of St. Paul, for respondent.

GALLAGHER, C. J.: Pursuant to an investigation of the reasonableness of all schedules of exchange rates and charges maintained and collected by the Tri-State Telephone and Telegraph Company in the St. Paul Metropolitan Exchange Area, the Railroad and Warehouse Commission on March 31, 1936, made an order reducing the then rate schedules by approximately 25 per cent. Its order was affirmed by the district court May 21, 1937. The district court judgment was affirmed by this court February 24, 1939. State v. Tri-State Teleph. & Teleg. Co. 204 Minn 516, 28 PUR (NS) 158, 284 NW 294. Pending the appeals, defendant procured a stay order, for which it gave a bond to secure its conditions, enjoining enforcement of the Commission's order until final determination by this court. Upon remittitur, the district court made a supplemental order and decree which required the company to pay back all sums paid by the subscribers in excess of the sums authorized to be charged for such service by the Minnesota Railroad and Warehouse Commission subsequent to May 31, 1936, and prior to the effective billing dates on and after June 1, 1939, together with interest on each payment for such service at the rate of 6 per cent per annum from the date of payment.

Under both the old and the new schedule of rates, a discount of 50 cents was allowed to each subscriber whose bill was paid before a fixed date each month. Appellants and other subscribers at times during the 3-year period (June 1, 1936, to June 1, 1939) failed to pay their bills before the discount date, and therefore, were not allowed the 50-cent reduction. They instituted suit for the recovery of the discounts not accorded them during the 3-year period, claiming (1) that the discounts are a part of the excess payments ordered repaid by the original judgment and supplemental decree; and (2) that the subscribers, by paying at the old rates during the three years involved, made overpayments which should have been set off against subsequently accruing bills, thereby entitling them to discounts for prompt payment of succeeding months' bills. The action was consolidated with and made a part of the original proceedings. The trial court found:

"1. That between June 1, 1936, and June 1, 1939, the overpayments upon telephone charges to the defendant were in no instance applied in fact or in effect to the payment of subsequent accruing telephone bills of any of the subscribers.

"2. That while the litigation was pending it was neither practicable nor expedient for the defendant company to apply the overpayments upon telephone charges as gauged by the excess of the bills rendered over and above the amounts authorized by the March 1, 1936, order to the payment of subsequently accruing telephone service charges.

"3. There was no equitable duty on the part of the defendant company to apply the amount of said overcharges

to subsequently accruing telephone charges prior to June 1, 1939."

It concluded that the suit was not maintainable. The appeal is from the order denying plaintiffs' claims.

1. In support of their first point, appellants argue that in paying the old rates with penalties during the 3-year period they paid charges greatly in excess of the new net rates authorized by the Commission's order which was finally sustaintd by the court. They contend that the excess referred to in the judgment and supplemental decree includes everything paid over and above the new net rate; that it embraces the difference between the new net rate and the old net rate and includes the discounts or penalties which were added to and became a part of the old net rates. Paragraph 4 of the judgment reads: "The company is required to refund to the telephone subscribers forthwith all sums charged said subscribers for telephone service on and subsequent to June 1, 1936, in excess of the sums authorized to be so charged by the Minnesota Railroad and Warehouse Commission."

The supplemental order provides that every telephone subscriber who was charged for service subsequent to May 31, 1936, and prior to the effective billing dates on and after June 1, 1939, "is entitled to be paid back all sums paid by said subscriber in excess of the sums authorized to be charged for such service by the Minnesota Railroad and Warehouse Commission . . . together with interest on each payment for such service at the rate of 6 per cent per annum from the date of payment."

It does not appear that the claim now made was presented to or considered by the trial court in the original proceedings, nor did these appellants in their complaint plead that their failure to pay within the prescribed discount period was occasioned by the fact that they were billed at the old rate, or that they would have paid within the period if they had been billed at the new lower rate. The discount provision was authorized in both the old and the new schedules.

Neither the judgment nor the supplemental decree requires the repayment of these items. It is clear that it was not intended that defendant be required to pay interest on the excess payments and to refund the penalties. The excess has been refunded with interest, and that is all that is required. There is not merit to the claim that the penalties constitute a part of the excess contemplated by the judgment and decree.

2. Equally untenable is the argument that the subscribers are entitled to offset the overpayments against subsequently accruing telephone bills during the period of litigation pending a final determination of the matter by the court. Aside from the impracticability of the plan proposed by appellants, there are well-recognized legal principles barring a recovery of the discount items here sought. The order and bond staying the operation of the new rate schedule pending the appeals required the company to keep intact the amount of the difference between the charge authorized by the old schedule and that authorized by the new one, and, if the Commission's new order should be sustained by the court, as it was, to repay each such amount to

the subscriber with legal interest thereon from the date of each payment.

The imposition of the legal rate of interest is, under our statute (2 Mason Minn. Stats. 1927, § 7036), in lieu of all other damages. Brown v. Pipestone (1932) 186 Minn 540, 541, 245 NW 145; Mason v. Callender, Flint & Co. (1858) 2 Minn 350, 72 Am Dec 102.

Appellants concede that they have been repaid all amounts charged in excess of those authorized by the new rate schedule with interest. They cannot now be heard to claim that those same amounts should have been applied on bills subsequently accruing. So to hold would be to nullify the effect of the stay order, bond, judgment, and supplemental decree heretofore entered in these proceedings. State v. Tri-State Teleph. & Teleg. Co. (1939) 204 Minn 516, 28 PUR(NS) 158, 284 NW 294.

At no time until the litigation was terminated did a subscriber have a matured credit against the company which could be applied against an obligation due from him to the company. Milliken v. Mannheimer (1892) 49 Minn 521, 52 NW 139. A party cannot avail himself of a matter as a setoff unless it is a legally subsisting cause of action in his favor upon which he could maintain an independent action. 57 CJ p. 387. See, also, Central Louisiana Power Co. v. Thomas, 145 Miss 352, PUR1927B 654, 110 So 673, 111 So 142; Rushville Coop. Teleph. Co. v. Irvin (1901) 27 Ind App 62, 59 NE 327, affirmed (1903) 161 Ind 524, 69 NE 258.

It is not shown that appellants ever requested or expected the company to apply the excess payments upon accruing bills, or that the company did so apply them. Whether a transfer of money or other thing will operate as payment of a debt is determined by the intention of the parties. It must be received as well as paid in satisfaction of the debt. In Re Schanke & Co. (1926) 201 Iowa 678, 685, 207 NW 756; State Bank of Wheatland v. Turpen (1934) 47 Wyo 284, 34 P(2d) 1; Hutchings v. Securities Exch. Corp. (1939) 287 Mich 701, 284 NW 614.

We agree with the view of the trial court that the rights of the parties are fixed by the judgment and supplemental decree, and we find nothing inequitable in the rejection of the present claim.

The order appealed from is affirmed.

STONE and PETERSON, JJ., took no part in the consideration or determination of this case.

DISTRICT OF COLUMBIA PUBLIC UTILITIES COMMISSION

Re Potomac Electric Power Company

[Order No. 2000, Formal Case No. 296, PUC No. 3261.]

Expenses, § 114 — Income taxes — Accruals or payments.

1. Operating expenses should reflect income taxes actually reported and paid where a company has accrued income taxes on the basis of a 3 per cent depreciation rate but has made its return and paid its tax on the basis of a 3.5 per cent rate, p. 317.

Expenses, § 46 — Charitable contributions.

2. Charitable contributions are not properly included in operating expenses, p. 317.

Procedure, § 36 — Rectification of errors — Accounting.

3. The Commission may at any time rectify errors or omissions and may at any time exclude from the rate base an item which it deems improper, although such item was permitted by earlier accounting classifications, p. 318.

Valuation, § 250 — Contributions by consumers.

4. Amounts paid by consumers under a rule requiring customers to pay the difference between war-time and so-called normal costs of service extensions are contributions which are to be excluded from the rate base, p. 318.

Return, § 5 — Sliding-scale agreement — Adjustment for time lag.

5. A month's lag in rate reduction after the end of a year on which reductions are based under a sliding-scale agreement is properly met by means of a formula providing that from the portion of excess earnings available for rate reduction there shall be deducted the difference in the revenue from the kilowatt hours sold in January and February of the test year at the rates in effect during those months and the same kilowatt hours at the rates in effect during the balance of the test year, the resulting amount being absorbed by new rate schedules so devised as to effect a reduction in gross income of that amount from March 1st to December 31st of the year following the test year, based upon the test year kilowatt hours March 1st to December 31st, p. 318.

[February 4, 1941.]

INVESTIGATION *of earnings of electric company under sliding-scale agreement; rate adjustments ordered.*

APPEARANCES: S. Russell Bowen, William K. Laws, Alfred G. Neal, James H. Ferry, Harold A. Brooks, and Max Mason, for the Potomac Electric Power Company; Richmond B. Keech, General Counsel, Lloyd B. Harrison, Special Assistant Corporation Counsel, V. A. McElfresh, Chief

Accountant, and Fred A. Sager, Chief Engineer, for the Commission; W. Joseph Tewes, appearing on behalf of Maryland Public Service Commission; Charles M. Maize, for Federation of Citizens' Associations.

By the COMMISSION: Pursuant to notice, public hearing was begun January 24, 1941, for the purpose of determining excess income and fixing rates of the Potomac Electric Power Company for the ensuing year pursuant to the provisions of the sliding-scale agreement.

Testimony presented by witness Neal for the company indicated that the one-half excess earnings available for rate reductions amounted to $160,-703.20, whereas, the figure presented by witness McElfresh for the Commission was $318,315.82.

The most important elements of difference are to be found in operating expenses. They include: (1) An adjustment made by the company's witness for retired property; (2) an adjustment made by the Commission's witness for income tax accruals; and (3) elimination by the Commission's witness of certain contributions. These will be discussed in order.

(1) The adjustment made by the company's witness was to add to operating expenses a sum of $195,058.48 representing retirements of property which, under the accounting practice in effect prior to January 1, 1939, had formerly been directly charged to maintenance rather than to the retirement reserve as at present. This matter was considered by the Commission at a former hearing (Formal Case No. 289). The Commission then said that it was not in possession of such definite information as would support the company's contention on the basis of experience. The Commission is still of the same opinion.

[1] (2) The adjustment made by the Commission's witness for income tax accruals was a deduction of $107,-310.81 from operating expenses. This deduction represents the difference between an income tax accrual computed with a 3.0 per cent deduction for depreciation as against a similar accrual computed at a 3.2 per cent deduction for depreciation. It appears that the company has, for the years 1938, 1939, and 1940, accrued income taxes on the basis of the above-mentioned 3.0 per cent depreciation rate, but for the years 1938 and 1939 made its return and paid its tax on the basis of a 3.5 per cent rate. The Commission is of the opinion that the proper adjustment should reflect the taxes actually reported and paid for the years 1938 and 1939 and leave the 1940 accrual at the book figure until the return is filed. This will result in a deduction of $144,687.81 instead of the $107,-310.81 made by the Commission's witness.

[2] (3) Certain contributions eliminated by the Commission's witness aggregated $23,018.99. They included contributions to the Greater National Capital Committee, Cherry Blossom Festival, National Symphony Orchestra, and the like. The impropriety of the inclusion in operating expenses of charitable contributions is quite clear. The Commission is of the opinion that the contributions here claimed should be excluded on the following authority: (Denver Union Stock Yard Co. v. United States (1938) 304 US 470, 482, 82 L ed 1469, 24 PUR(NS) 155,

58 S Ct 990; Public Service Commission v. Kansas City Power & Light Co. (Mo 1939) 30 PUR(NS) 193; Re Northern States Power Co. (ND 1938) 22 PUR(NS) 364.) In addition, the benefits flowing to the company and through the company to the consumer are conjectural in character.

There are two substantial items of difference in the rate base figures used by the witnesses in their computations which are reflected in the amounts found by them to be available for rate reduction.

[3] One is an item of $101,299.74 excluded by the Commission's witness which represents expenses in connection with the issuance of preferred stock in the years 1925 and 1927. The company contends that inasmuch as this charge was permitted by earlier accounting classifications it should be continued notwithstanding different treatment by the present classification. The Commission is of the opinion that the item should not have been included at any time in the rate base. The Commission may at any time rectify errors or omissions.

[4] Another difference is an item of $25,691.87 deducted by the Commission's witness. This represents amounts paid by consumers in Maryland, after the adoption of the sliding scale, under a rule promulgated during the World War, requiring customers to pay the difference between war-time and so-called "normal" costs of service extensions. These are clearly contributions which are to be excluded under the Commission's decisions.

A general application for an increase in the rate of depreciation accruals was made by the company. No reason for change is found to exist at present. Further, it appears that the Potomac Electric Power Company is outstanding among electric utilities in its class with respect to the magnitude of its depreciation reserve.

In view of the foregoing and all the evidence of record in this case, the Commission finds that the weighted rate base for the calendar year 1940 was $84,978,701.40; the unweighted rate base at December 31, 1940, was $91,538,671.64, and the amount available for rate reduction is $337,004.32.

[5] There is one other item for disposition. Much testimony was given concerning the necessity for an adjustment of the month's lag occasioned by the fact that rate reductions are not put into effect until February 1st of each year, whereas, the amounts available for return are determined on a calendar year basis, beginning January 1st.

Undoubtedly, the precise execution of the sliding-scale method calls for change of rates in the first month of the year following that for which the excess is determined. But the data required are not available until the last part of the first month of the following year, after which the hearing must be held. The conclusion will not be reached until at least one month's bills have been sent out.

An adjustment could be made in all these bills and refunds credited on the following month's bills, but this procedure would be unduly expensive. An adjustment by means of the formula prescribed in § 2 (C) 2, herein will result in the precise equivalent in reduction of cost of service to the consumer for the year following that for which the excess is determined and a

corresponding decrease in the gross revenues of the company.

The Commission has considered schedules for absorbing the amount hereinbefore found to be available for reductions of rates, tolls, and charges. The rates hereinafter stated will effect this reduction.

The Commission is of the opinion that the rates, tolls, and charges, and other matters as set forth in this order, are fair and reasonable under the record.

It is *ordered:*

Section 1. That the rates, tolls, and charges to be charged monthly by the Potomac Electric Power Company for electric service in the District of Columbia shall be in accordance with the following schedules, riders, general terms, and conditions, and general information, to become effective as to subsection I on meter readings taken on and after February 1, 1941, and as to subsections II and III to become effective February 1, 1941, all to remain in full force and effect until otherwise ordered by the Commission.

[Schedules omitted.]

Section 2. *Sliding-scale Arrangement.*—That rates to be charged by the Potomac Electric Power Company shall be fixed in accordance with the following sliding scale:

(A) In order to ascertain the rate of return during any 12-month period, a rate base of the property of the Potomac Electric Power Company, used and useful in the public service, shall be used which shall be determined by taking the last value ascertained, prior to the beginning of said period, adding thereto the net additions and betterments up to the beginning of said period; and then adding thereto the net additions and betterments during said period, undepreciated, but weighted. That is to say, that the same formula heretofore used shall be continued in ascertaining the rate base.

(B) On the depreciation reserve, $14,100,847.78 as of December 31, 1940, plus accretions thereto, interest will be accrued monthly at the rate of 4 per cent per year and treated as an accretion to the reserve, lessening the amount of depreciation to be included each month, as an expense of operation. Depreciation is to be based upon a modified straight-line basis described in the method below:

When the depreciation reserve is below 15 per cent of the rate base for property indicated above, plus additions, the following rate applies—2.3 per cent of said rate base.

When the depreciation reserve is 15 per cent of the said rate base, but less than 16 per cent of said rate base, the following rate applies—2.1 per cent of said rate base.

When the depreciation reserve is 16 per cent of the said rate base, but less than 17 per cent of said rate base, the following rate applies—1.9 per cent of said rate base.

When the depreciation reserve is 17 per cent of the said rate base, but less than 18 per cent of said rate base, the following rate applies—1.7 per cent of said rate base.

When the depreciation reserve is 18 per cent of the said rate base, but less than 19 per cent of said rate base, the following rate applies—1.5 per cent of said rate base.

When the depreciation reserve is 19 per cent of the said rate base, but less than 20 per cent of said rate base, the

following rate applies—1.3 per cent of said rate base.

Thereafter the accretions of the depreciation reserve shall be such as not to make the total of said reserve in excess of 20 per cent of the rate base for the property as stated above, plus additions.

(C) 1. If the rates hereafter yield more than 6 per cent in any calendar year (hereinafter referred to as the test year), on the rate base for that year, determined as aforesaid, the excess over and above the said 6 per cent shall be used in a reduction of rates to be charged the public for electric service, beginning March 1st of the following year, as follows:

If the amount earned is more than 6 per cent and not more than 7¼ per cent of the rate base, rates for the twelve months following March 1st based on the business done during the test year, shall be so adjusted (by use of the formula stated below (C) 2), that the gross receipts of the company during the year next following the test year shall be reduced by 50 per cent of such excess; if the amount of return is in excess of 7¼ per cent and not more than 8 per cent, an additional amount of 60 per cent of the said excess over 7¼ per cent shall be used for the reduction of rates; if the amount earned is in excess of 8 per cent, a further additional amount of 75 per cent of the excess over 8 per cent shall be used in like manner for the reduction of rates.

(C) 2. Formula for rate reduction: From the portion of the excess which is available for rate reduction shall be deducted the difference in the revenue from the kilowatt hours sold in January and February of the test year at the rates in effect during those months and the same kilowatt hours at the rates in effect during the balance of the test year. The resulting amount will be absorbed by new rate schedules so devised as to effect a reduction in gross income of that amount, from March 1st to December 31st of the year following the test year, based upon the test year kilowatt hours March 1st to December 31st.

(D) If the rate of return for any two consecutive years falls below 5¾ per cent of the rate base for each of the two said years, or if the rate of return for any consecutive 12-month period falls below 5½ per cent of the rate base for the same period, the Commission shall promptly increase rates, in a manner similar to that prescribed above for a reduction of rates, so as to yield as nearly as may be 6 per cent upon the rate base as of the date of the order effecting such changes in rates.

Section 3. That orders, or parts of orders, of the Public Utilities Commission repugnant to the provisions of this order be canceled as of the effective date of this order.

Industrial Progress

Selected information about manufacturers, new products, and new methods. Also news on utility expansion programs, personnel changes, recent and coming events.

Engineers Public Service Co. Plans $17,000,000 Expansion

ENGINEERS Public Service Co. plans to spend $17,000,000 in expanding its facilities this year, it announced in the annual report to stockholders.

Expansion costs in 1939 were $11,665,000 and $11,726,000 in 1940. The construction program in 1941 has been enlarged in several subsidiaries, particularly in the Virginia company, by the demands of the defense program.

Industrial Wheel Tractors

INTERNATIONAL Harvester's latest additions to its line of industrial power equipment are five new wheel tractors. Designated as the "I" line, three models have carburetor-type engines and two International's quick, easy starting, full-Diesel engines.

These new "I" models are especially adapted for a variety of construction, maintenance, materials-handling, and transportation work for public utilities, railroads and other industries.

All the five new tractors have Tocco-hardened crankshafts, pressure lubrication, replaceable cylinders, five forward speeds up to 15 miles per hour (except the I-6 and ID-6 which have five speeds up to 14 miles per hour), gear drive, countershaft brakes that can be individually controlled or interlocked, provision for mounting a variety of allied equipment, and various other features.

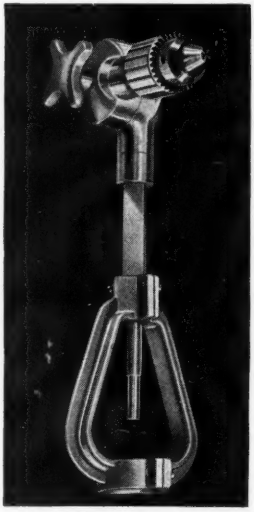
New Eyeshield Assembly

ANNOUNCEMENT is made by Mine Safety Appliances Company, Pittsburgh, Pa., of the new M.S.A. Dustfoe-Eyeshield Assembly and Comfo-Eyeshield Assembly. These units furnish approved respiratory protection against even invisible particles of harmful dust, and guard the wearers' eyes from flying dust and grit by a light, durable, transparent plastic shield, according to the manufacturer.

Kett Universal Multiplies Use of Electric Drills

A NEWLY patented mechanical appliance which greatly facilitates the use of electric drills has been developed by the Kett Appliance Company, Cincinnati.

This new attachment, known as the Kett Universal, enables the operator of an electric



Device Aids Electric Drilling

drill to perform a number of jobs which formerly required the use of a special size tool for each operation. The Kett Universal attachment used with a ½ in. electric drill will bore holes up to 1¼ in. diameter through 360 degrees of angles in any plane. Work may be done in restricted spaces in which it has hitherto been impossible to operate an electric drill. For example, on a steamfitting job 1½-in. holes were bored through a series of joists on 8½-in. centers by the use of the Universal attachment. Incidentally, this job was done in about one-sixth the time it formerly took to do it by hand.

When using the new tool to bore larger size holes, the drill head is adjusted to a 45 degree angle, thus providing a leverage which eliminates all "jumping."

The Kett Universal is produced in five dif-

ferent sizes. The largest size will drill holes up to 2 in. at any set angle. The next size, which is particularly useful for electricians, bores holes up to 1¼ in. Both models are telescopic and enable the operator to bore holes in joists in 10-ft. ceilings while standing on the floor. There are three attachments for use on ¼ in. electric drills for garage and small maintenance work. An important feature of these attachments is that they can be fitted on a drill in a couple of minutes.

Constant-Level Oiler

A NEW line of visible automatic constant level oilers, with unbreakable reservoirs and adjustment oil level features, is announced by the Trico Fuse Mfg. Co., Milwaukee, Wis.

The oiler illustrated automatically maintains the proper oil level in ring or ball bear-

Automatic Oiler Has Unbreakable Reservoir

ings, gear and pump housings, etc., reducing maintenance expense, bearing failures, waste of oil or grease, oil-soaked motor windings, damage to materials, fire hazards, and other dangers which accompany the old-fashioned, antiquated, hand-oiling methods.

One filling of the crystal-clear unbreakable reservoir is sufficient to lubricate a bearing three months or longer, without attention. The visible oil supply tells at a glance when refilling is necessary.

Complete descriptive folder and catalog are now available from the manufacturer.

Effective Insulator Cleaner

LOCKBRITE insulator cleaner is being offered utility operating companies as an effective and harmless cleaner by the Locke Insulator Corp., Baltimore, Md.

According to the manufacturer, Lockebrite is easy to use, inexpensive and cannot harm the porcelain, the galvanizing, the cement or the user.

A sample of this insulator cleaner may be obtained from the manufacturer upon request.

Airplane Wing Designs for Deep Well Pumps

THE well known and readily recognized airfoil sections used in modern airplane wings are being commercially applied to deep well and propeller pumps. The airfoil principles adapted to the propeller vane sections have been thoroughly and successfully applied to deep well applications by the Peerless Pump Division of the Food Machinery Corporation. The improvement in performance found by adaptation of the airfoil section to deep well impellers and bowls has been carefully observed over the past three years, during which time they have been continuously put in commercial use.

The specific advantages have been—namely, higher efficiencies and better pump life. While the thicker vane sections increase first cost somewhat, the improvement in performance and life warrant this increase many fold in higher prolonged efficiency.

Portable Utility Lamp

A PORTABLE lamp (Big Beam No. 700) manufactured by the U-C Lite Manufacturing Co., Chicago, is designed to provide a powerful, penetrating ray, which can also be diffused with the use of an interchangeable floodlight lens, or a snap-on type floodlight lens, if desired.

U-C Lite Easily Focused

This portable lamp is ruggedly constructed with all steel battery container, aluminum carrying handle, heavy duty lens and special long life, horizontal filament, prefocused type bulb. The lamp head is attached to the carrying handle by means of friction joint and this allows the head to be focused with a light touch of one hand while the lamp is being carried and it will stay in this focus; jolting

and jarring will not change it. The head can be supplied in either black Japan finish, or chromium plate finish. Switch is placed where it can be instantly controlled with the thumb of the hand carrying the lamp.

Big Beam No. 700 is powered by four ordinary No. 6 dry cells, and it has an unusually long operating life on one set of batteries. Tests show that this lamp will provide efficient illumination for any all night service job when used continually and will last weeks or months when used intermittently.

Camera Contest Sponsored by Connelly Company

JUDGES for the amateur photographic contest being sponsored among gas company personnel by the Connelly Iron Sponge & Governor Company, 3154 S. California Avenue, Chicago, manufacturers of iron oxide purifying materials and gas apparatus, were recently announced as follows: Samuel Insull, Jr., Chicago, Vernon G. Leach, Chicago and Lester J. Eck, Minneapolis, Minnesota. Both Mr. Insull and Mr. Leach are members of the Chicago Camera Club. Pictures made by Mr. Insull, who is associated with W. A. Alexander & Company, Chicago, have been hung and won awards in many exhibitions.

Mr. Leach, chief combustion engineer of the Peabody Coal Company specified and purchased all the photographic equipment for the current Byrd Antarctic Expedition. Mr. Eck, general superintendent of the Minneapolis Gas Light Company is known as one of the most enthusiastic amateur photographers in the Northwest. His prints have been hung in salons such as Eastman Kodak and McGills.

The Connelly Photographic Contest which started March 1st and continues to June 30th is open only to officers and employees of gas companies and their families. It is reported that this contest has already caused tremendous interest among the picture taking fraternity in the gas industry. Seventeen cash awards totalling $255 are at stake. In addition, the Connelly Iron Sponge & Governor Company offers to pay $3 per picture for any subject which they consider suitable for advertising uses.

Entries are being grouped into three classifications and will be judged on the basis of composition and technical execution as well as pictorial value and appropriateness of subject.

Details may be obtained by writing the Contest Manager, Connelly Iron Sponge & Governor Co., 3154 S. California Ave., Chicago, Illinois.

Birdseye Floodlite

A BIRDSEYE Floodlite designed for general lighting purposes has been announced by Birdseye Lamp Sales Division, Wabash Appliance Corp., 335 Carroll St., Brooklyn, N. Y. This new Floodlite delivers a concentrated flood of light in a medium beam that is especially effective in applications requiring intense illumination for exacting work.

The Floodlite is essentially an incandescent filament bulb with a lining of pure silver sealed inside to form a reflecting surface that cannot be dulled or tarnished by dust or fumes. For localized lighting to supplement general illumination, a detachable swivel socket focuses the light exactly where needed. The Floodlite is made in the "RE" short bulb, in four sizes and four separate voltages, from 100 to 300 watts, and 110 to 125 volts.

Silex Poster Aids Sales

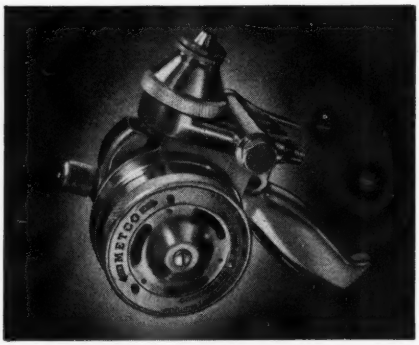
THE Silex Company offers to dealers free upon request an unusually attractive window poster for Mother's Day, May 11th.

This sales-alluring display piece is 24 in. x 12 in., lithographed in two colors, deep blue and rose, and suggests a Genuine Silex Glass Coffee Maker as the perfect gift for Mother's Day. These posters may be obtained by dealers from their distributors or by writing direct to the Silex Company, Hartford, Connecticut.

Window Poster Promotes Silex for Mother's Day

Metallizing Gun Improved

Two major improvements have been made in the Type 2E Metallizing Gun produced by the Metallizing Engineering Co., Long Island City, N. Y. The equipment may be used as a lathe tool for restoring worn machine parts of all kinds, or it may be used as a hand tool for applying corrosion resistant coatings.



Improved Type 2E Metallizing Gun

One added feature of the Type 2E gun is the "controlled power unit" which gives a uniform and steady wire feed for production service and eliminates the need for gear changes. The other new feature is the "universal gas head" which allows the use of acetylene, propane, hydrogen, natural or manufactured gas with balanced pressures and without changing heads.

In addition this gun has improved spraying characteristics and the jet construction reduces gas consumption. The complete tool weighs only 4¾ lb. All parts are completely interchangeable and may be assembled without adjustments.

Equipment Literature

Permaflector Lighting

Permaflector Lighting—a 112 page, illustrated 8½ x 11 in. catalog (No. 40) has been issued by Pittsburgh Reflector Co., Oliver Bldg., Pittsburgh, Pa. This exceptionally well prepared and complete publication describes how Permaflectors are made and emphasizes the four important steps in achieving the lasting brightness which, according to the manufacturer, has made Permaflectors the standard of efficiency and economy in the lighting field.

An interesting introduction to members of the executive staff of the Permaflector organization is included.

The descriptions of all lighting equipment and accessories are given in detail with specifications and clearly reproduced drawings. A spiral type binding facilitates the use of this "Tell-All" publication.

Report on Mulsifyre Projectors

Those interested in the control of oil fires will find much of interest in a recently published book—"Report on 'Mulsifyre' Projectors" (Underwriters' Laboratories, Inc.). It's an authoritative, well-illustrated, 77-page book. Every man who faces the problem of handling vicious oil fires will find it worth reading, for it describes in detail an emulsification system for extinguishing oil fires with water alone.

The book contains installation diagrams for transformers, turbines, oil switches, circuit breakers, oil pipe lines, oil coolers, open tanks and ships. Fire test records and field reports document the study, giving it great practical usefulness. Copies are available by writing to Grinnell Company, Inc., Providence, R. I.

Mercoid Automatic Controls

Mercoid Automatic Controls for heating, air conditioning, refrigeration and various types of industrial applications are described in an attractive 64-page (8½ x 11 in.) catalog (No. 500) recently issued by The Mercoid Corp., 4201 Belmont Ave., Chicago.

The publication emphasizes the fact that from the very beginning, Mercoid automatic controls have employed the now famous hermetically sealed Mercoid switch. The exclusive use of these switches is one of the distinguishing features of Mercoid controls. The many other outstanding characteristics in the design, construction, and operation of Mercoid controls are adequately covered in this comprehensive publication.

Industrial Insulation—Fiberglas

Industrial Insulation is the subject of a 16-page, 8½ x 11 in. illustrated booklet issued by Owen-Corning Fiberglas Corp., Toledo, O.

How Fiberglas industrial insulation on pipes, tanks, ducts, turbines and in many other installations provides high efficiency in the control and conservation of heat is described in detail. Brief specifications for selection and application of Fiberglas insulations are included in the booklet.

Allis-Chalmers' Annual Review

The Annual Review of Sales and Engineering Developments, issued by the Allis-Chalmers Manufacturing Company, Milwaukee,

Q. How can I cut my hauling costs?

A. Look and Save! Buy the One-Two-Three Way...

OMPARE TRUCKS—Here's a suggestion that's as free as the air you breathe. nd it can save you some money . . . maybe *lot of money!*

uy your trucks the one-two-three way! In ther words, before you lay your money on e line for any truck, look at Dodge Jobated trucks.

OMPARE QUALITY—Check and mpare all important truck units. Be sure ey're the *right* quality and the *right* size the truck you buy . . . built for the job . . . to stay on the job . . . to save you money!

They will be *right* in a Dodge Job-Rated truck . . . because that's what "Job-Rated" means . . . trucks *built to fit the job!*

When you pay for quality, *get quality* . . . Dodge quality . . . *built-to-last quality* . . . in design, materials and workmanship.

You don't have to pay extra money for such a truck, because Dodge Job-Rated trucks are priced with the lowest. See your Dodge dealer now for a "good deal."

EPEND ON DODGE *Job-Rated* TRUCKS

Job-Rated MEANS A TRUCK THAT FITS YOUR JOB

Better BECAUSE OF CHRYSLER CORPORATION ENGINEERING

PRICED WITH THE LOWEST

Chassis .. $500 AND UP (WITH COWL)
Chassis .. $595 AND UP (WITH CAB)
Pick-Ups $630 AND UP
Panels .. $730 AND UP
Stakes .. $740 AND UP

Above prices are delivered at Detroit, Federal taxes included. Transportation, state and local taxes (if any) extra. All prices shown are for ½-ton except stake model which is for ¾-ton. 112 standard chassis and body models available.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

DODGE DIVISION, CHRYSLER CORPORATION, DETROIT, MICH.

Equipment Literature (cont'd)

gives a graphic picture of Allis-Chalmers' coöperation with industry, agriculture and, most important at this time, with the National Defense Program.

How the company has expanded its shops, increased its working personnel, invested in new equipment, how it is training more young men than ever before in its apprentice and student training courses, are told in a foreword by President Max W. Babb.

The hundred pages and 240 illustrations of this book show in a most interesting manner how Allis-Chalmers is supplying the pressing needs of the utilities and the other industries it serves.

De-ion Protector Tubes

De-ion protector tubes to prevent damage to transmission lines during electrical storms are described in a new 20-page bulletin announced by Westinghouse Electric and Manufacturing Company.

A general discussion includes economic advantage, function, and types of protector tubes with current interrupting ratings between 300 and 5000 amperes. Tables give ratings, style numbers, accessories, and other pertinent data.

Principle of operation and construction are explained with a note on impulse and flashover characteristics. Supporting structures and mounting brackets are fully described and illustrated. A series of illustrations shows actual installations on typical power lines.

A copy of descriptive data 38-200 may be secured from department 7-N-20, Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa.

Mitchell Fluorescent Lighting

Several bulletins describing commercial and industrial fixtures for fluorescent lamps have been issued recently by the Mitchell Manufacturing Co., 2525 Clybourn Ave., Chicago.

Bulletin No. 231 describes the Mitchell industrial fixture (unit No. 2026) for the new 100 watt fluorescent lamps. Bulletin No. 233 illustrates two commercial fluorescent fixtures (Models 2027 and 2028) which employ two and four 40-watt 48 in. lamps respectively. Two new surface mounting fixtures (Models 2029 and 2030) using the same lamp sizes as the other two commercial fixtures, are described in Bulletin No. 234. All fixtures bear the Underwriters' Laboratories and Fleur-o-lier certifications.

Terminal Blocks

Burke Electric Co., Erie, Pa., describes its line of terminal blocks in an attractive 4-page color folder. The bulletin points out that Burke bakelite controlead terminal blocks are moulded under enormous pressure in hardened steel moulds. The blocks are cured at constant temperatures that assure a uniformly dense and sturdy block—impervious to moisture and having high electrical resistance.

Manufacturers' Notes

G-E Meter at West Lynn, Mass.

The Meter Division of the Central Station Department of the General Electric Company, which has been located at Schenectady, is moving to West Lynn, Mass., the first week in May.

The new headquarters of the Meter Division will be in a recently built three-story office building which adjoins the manufacturing plant at West Lynn, where most of the products for which the Meter Division is responsible, such as watthour meters, demand meters, instruments, time switches, and dry type instrument transformers, are manufactured.

Okonite Changes

The Okonite Company and The Okonite-Callender Cable Co., Inc., recently announced several changes in the executive personnel.

Leland B. Duer, partner in the law firm of Duer & Taylor, of New York City, was elected a director of The Okonite Company to replace Geo. Murray Brooks, former executive vice president of the company who died in January. Mr. Duer has for several years participated in the work of the company's legal department.

Charles E. Brown Jr., formerly assistant to the president, was elected vice president of The Okonite Company and The Okonite-Callender Cable Co. Mr. Brown who has been associated with the company's sales department since 1925 will remain in charge of the Washington, D. C. office.

Albert F. Metz, treasurer of both The Okonite Company and The Okonite-Callender Cable Co. Inc. was elected a director of the latter organization. Mr. Metz has served as a director of The Okonite Company for many years, and has been connected with the company's financial department since 1919.

Combustion Promotes Walker and Ebdon

Donald S. Walker, for several years past general sales manager of Combustion Engineering Company, Inc. was named vice president in charge of sales at a recent meeting of the board. Mr. Walker is a graduate of the U. S. Naval Academy, class of 1924, and for the next ten years was associated with D. H. Skeen & Company of Chicago, in charge of Ljungstrom Air Preheater sales, becoming vice president of that company and subsequently president of its subsidiary, the Mercon Regulator Company. He joined Combustion Engineering Company in December, 1934, as manager of the Philadelphia District.

H. G. Ebdon, formerly assistant general sales manager, has been advanced to general sales manager to succeed Mr. Walker.

Pa. Transformer Appointment

N. M. Mintz & Associates, Chicago, whose appointment as sales engineering representatives for the Pennsylvania Transformer Company was announced in the last issue, will represent the company in its Chicago territory.

NINTH ANNUAL CONVENTION

of the

EDISON ELECTRIC INSTITUTE

June 2, 3, 4 and 5, 1941

BUFFALO, NEW YORK

Registration: Monday, June 2nd, 9:30 A. M., Hotel Statler. Tuesday, June 3rd, Wednesday, June 4th and Thursday, June 5th, 8:30 A. M., Kleinhans Music Hall.

Schedule of Events

GENERAL SESSIONS

Kleinhans Music Hall

Tuesday morning, June 3rd, 9:30
Tuesday afternoon, June 3rd, 2:00
Wednesday morning, June 4th, 10:00
Thursday morning, June 5th, 9:45

SOCIAL EVENTS

Dancing

Terrace Room—Statler Hotel
Monday evening, June 2nd, 9:00

Informal Gathering of all Delegates
Terrace Room—Statler Hotel
Tuesday afternoon, June 3rd, 4-7

Concert

Kleinhans Music Hall
Tuesday evening, June 3rd, 9:15

Bus Trip

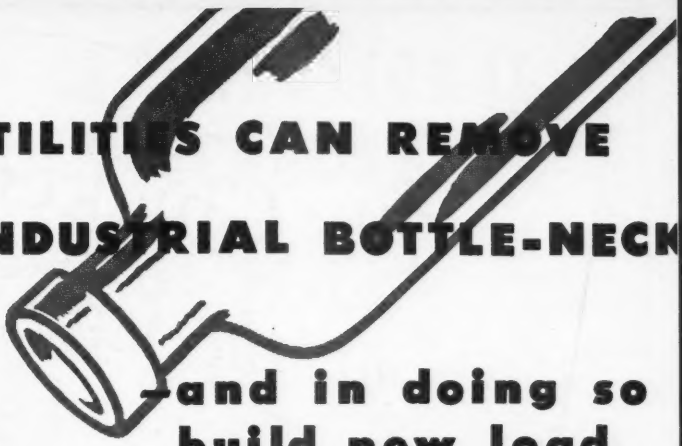
Visit to Niagara Falls and Tea at Niagara Falls Country Club
Wednesday afternoon, June 3rd, 2:30

Luncheon-Meeting

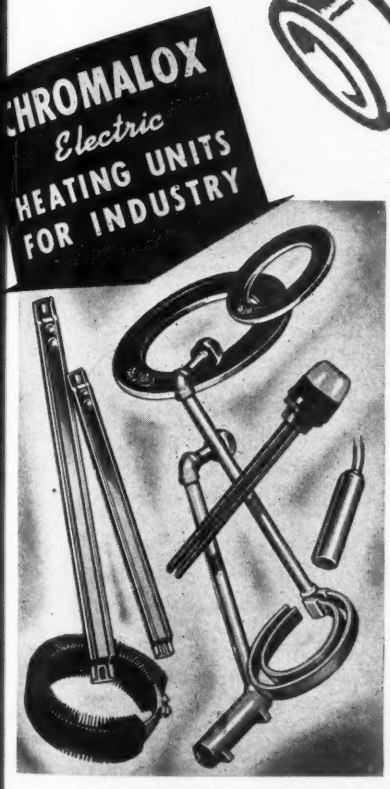
Ballroom—Statler Hotel
Thursday, June 5, 1:00 P. M.

ndustry needs MORE ELECTRIC HEA

HOW UTILITIES CAN REMOVE AN INDUSTRIAL BOTTLE-NECK



—and in doing so build new load



A few of the many standard Chromalox units, available in types and sizes for industrial heating applications.

BOTTLENECKS IN INDUSTRIAL PRODUCTION are often due to heating difficulty. Steam pressure may be low or inadequate, other heating means equally so, or lacking in uniformity, causing undue spoilage. New production methods may be rejected because of the installation delays attending steam.

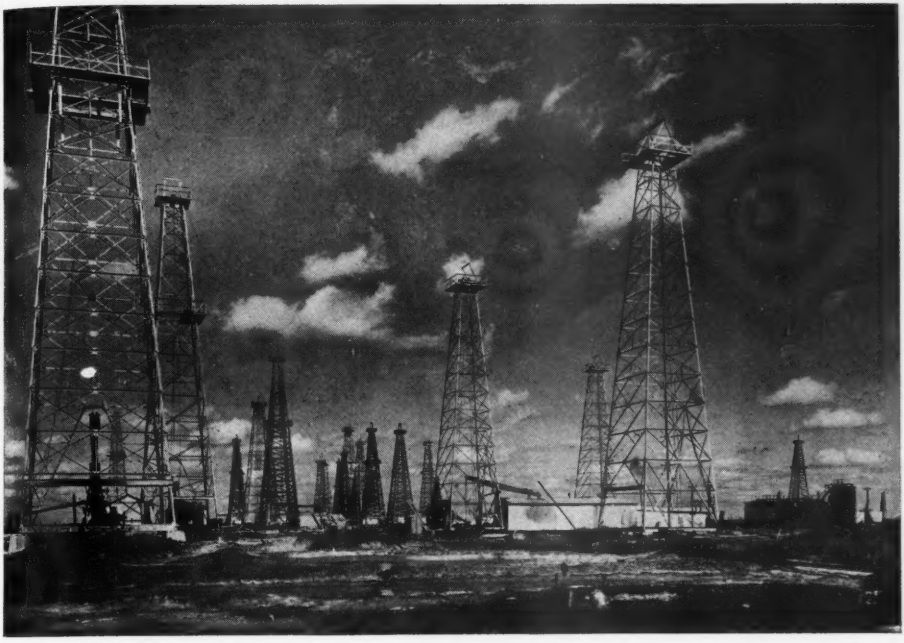
MR. UTILITY MAN, YOU CAN HELP boost that production curve. Tell your industrial customers about Chromalox electric heating units, how fast they work, how easily applied, how they are always ready to operate, maintain temperature uniformity with automatic control, develop heat when required and where it is needed.

CHROMALOX ENGINEERS are always ready to help you work out the detailed application of electric heat. Use this cooperation—and the data in the Chromalox Book of Electric Heat—on request.

EDWIN L. WIEGAND COMPANY
7500 Thomas Blvd. · Pittsburgh, Penn.

CHROMALOX

The load builder



NATIONAL DEFENSE NEEDS MORE THAN "ELBOW GREASE!"

Industrial lubrication, as exemplified by the role of Cities Service, plays a vital part

Lifeblood of the factory line is the precious oil that keeps the wheels of industry turning . . . spinning ever faster and faster as tanks, ships, planes and trucks spring from blueprints into cold steel.

In many phases of national defense, Cities Service's industrial oils have been called upon to help deliver maximum efficiency of operation.

We are honored by our selection, feeling that it indicates more plainly than words that we are qualified to meet the lubrication problems of industry. The vast experience of our Lubrication Engineers is available for consultation without cost. All you have to do is get in touch with us at any of the offices listed below.

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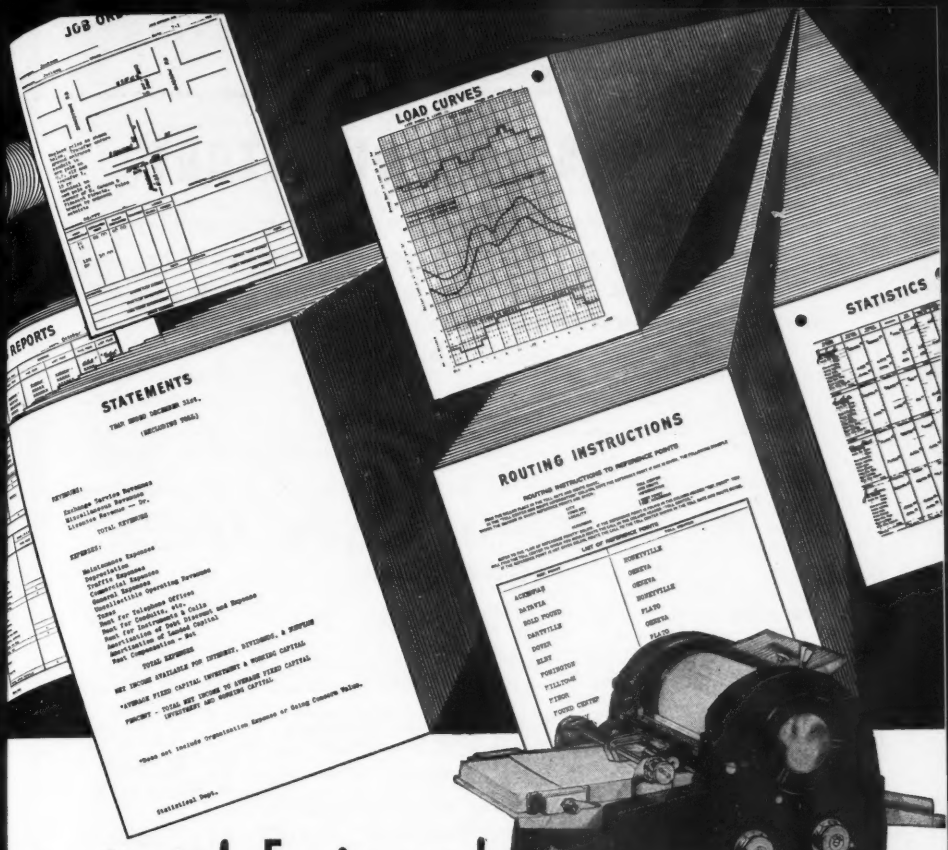
CITIES SERVICE OIL COMPANY — Chicago, New York, Cedar Rapids, Boston, St. Paul, Grand Forks, Kansas City, Fort Worth, Oklahoma City, Milwaukee, Cleveland, Detroit, Syracuse.

CITIES SERVICE OIL COMPANY, LTD. — Toronto, Ontario.

ARKANSAS FUEL OIL COMPANY — Shreveport, Little Rock, Jackson, Miss., Birmingham, Atlanta, Charlotte, N. C., Nashville, Richmond, Miami.



ccountants! Engineers!

DITTO

IS *YOU* MULTIPLIED MANY TIMES!

ese days, when personal effectiveness means so much, must turn to Ditto—to increase your influence, to eve yourself of detail, to be set for the demands the opportunities of this day!

n report operations alone, Ditto can be like an a staff of assistants to you . . . you'll know why this is when you see what other utilities men do with Ditto!

Without type, stencil or ink the new Ditto D-44 kes 300 and more bright copies of anything written, ed or drawn . . . rate schedules; operating and prog- reports; specifications; engineering drawings; vice, factory and work orders; forms, and the like 70 copies a minute, in one to four colors at once, for the first 100, 3c thereafter. Originals can be d repetitively—excellent for cumulative reports. Make your department more effective—get the whole y of Ditto's public utility performance on gelatin iquid duplicators. Use coupon for free idea-booklet, opies, Their Place in Business." No obligation!

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PROFESSIONAL DIRECTORY

• This Directory is reserved for engineers, accountants, rate experts, consultants and others equipped to serve utilities in all matters relating to rate questions, appraisals, valuations, special reports, investigations, financing, design and construction.

PROFESSIONAL DIRECTORY (*continued*)

INDEX TO ADVERTISERS

[The Fortnightly lists below the advertisers in this issue for ready reference. Their products and services cover a wide range of utility needs.]

*Fortnightly advertisers not in this issue.

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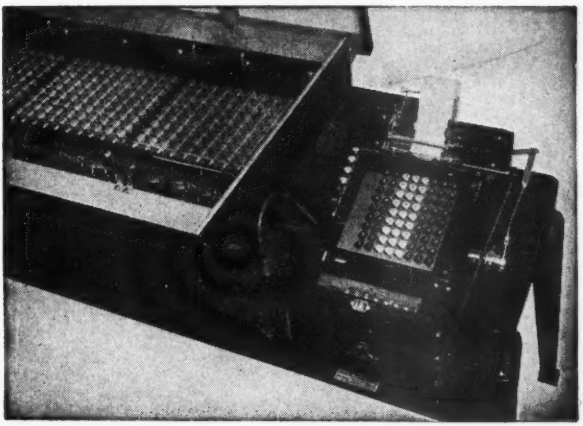
Customer Usage Data

• At Lower Cost • In Less Time

• With Greater Accuracy

THE ONE-STEP METHOD



OF BILL ANALYSIS

R & S Bill Frequency Analyzer: developed for our Utility Rate Service. The kw.-hrs. billed are entered on the adding machine keyboard. A tape is prepared of all items and a consumption total accumulated which serves as a control. At the same time—through this *single* operation—the bill count for each kw.-hr. step is made by the electrically controlled accumulating registers.

• A continuance of frequent rate changes—the necessity of checking load-building activities—the pressing need for current data on customer usage—are but a few of the reasons many Companies are using R & S ONE-STEP METHOD to analyze and compile information required for scientific rate making. They have not only reduced the costs on this work to an average of one-fifth of a cent per item, but have obtained monthly or annual bill-frequency tables in a few days instead of weeks and months.

• Write for your copy of "The One-Step Method of Bill Analysis," an interesting booklet which describes briefly how these savings are accomplished.

Recording & Statistical Corporation

Utilities Division

102 Maiden Lane, New York, N. Y.

Boston **Chicago** **Detroit** **Montreal** **Toronto**

Stag Parties Build Loa

FOR MIDNIGHT SUPPERS or regular meals, men as well as women find cooking easy with electric roasters. Westinghouse improvements and promotions have helped enroll thousands under the banner of electric cookery, bringing you profitable new load. And every year, new developments and improvements in the Westinghouse line of home appliances, help sell thousands of additional electric servants for the home, and build you a steadily increasing domestic load.

Westinghouse activities in research, in the manufacture, distribution and application of apparatus, and in promoting the use of electricity, result in better service to you and a wider use of electricity by your customers. They have been made possible and are continually encouraged by your purchases of Westinghouse apparatus.

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, EAST PITTSBURGH, PA.

Westinghouse

ELECTRICAL PARTNER OF THE CENTRAL STATION INDUSTRY